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## XLI ANTHROPOLOGY

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## **ANTHROPOLOGY**

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OXFORD UNIVERSITY PRESS LONDON NEW YORK . TORONTO First published in 1912 and reprinted (revised) in 1914, 1919, 1921, 1923, 1925, 1926, 1927, 1929, 1933, 1936 and 1944

### CONTENTS

CHAP. I	SCOPE OF ANTHROPOLO	<b>GY</b>				7
~ા.	ANTIQUITY OF MAN.		٠			<b>3</b> 0
111	RACE	•	•	•	•	59
· IV	ENVIRONMENT	•	•	•	•	94
▼	LANGUAGE	•	•			130
, <b>V</b> I	SOCIAL ORGANIZATION	•	•	•	•	152
vii	LAW		•	•	•	<b>1</b> 81
<b>A</b> III	RELIGION	•	•	•	•	<b>2</b> 04
IX	MORALITY	•	•	• ,	•	<b>2</b> 35
x	MAN THE INDIVIDUAL	•		•	•	<b>24</b> 1
	BIBLIOGRAPHY .		•	•		251
	INDEX					254

# Volumes of kindred interest already published in this series are:

- 82. Prehistoric Britain. Dr. R. Munro.
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better than they do on any other supposition. What is the truth that Darwinism supposes? Simply that all the forms of life in the world are related together; and that the relations manifested in time and space between the different lives are sufficiently uniform to be described under a general formula, or law of evolution.

This means that man must, for certain purposes of science, toe the line with the rest of living things. And at first, naturally enough, man did not like it. He was too lordly. For a long time, therefore, he pretended to be fighting for the Bible, when he was really fighting for his own dignity. This was rather hard on the Bible, which has nothing to do with the Aristotelian theory of the fixity of species; though it might seem possible to read back something of the kind into the primitive creation-stories preserved in Genesis. Now-a-days, however, we have mostly got over the first shock to our family pride. We are all Darwinians in a passive kind of way. But we need to darwinize actively. In the sciences that have to do with plants, and with the rest of the animals besides man, naturalists have been so active in their darwinizing that the pre-Darwinian stuff is once for all laid by on the shelf. When man, however, engages on the subject

of his noble self, the tendency still is to say: We accept Darwinism so long as it is not allowed to count, so long as we may go on believing the same old stuff in the same old way.

How do we anthropologists propose to combat this tendency? By working away at our subject, and persuading people to have a look at our results. Once people take up anthropology, they may be trusted not to drop it again. It is like learning to sleep with your window open. What could be more stupefying than to shut yourself up in a closet and swallow your own gas? But is it any less stupefying to shut yourself up within the last few thousand years of the history of your own corner of the world, and suck in the stale atmosphere of its own self-generated prejudices? Or, to vary the metaphor, anthropology is like travel. Every one starts by thinking that there is nothing so perfect as his own parish. But let a man go aboard ship to visit foreign parts, and, when he returns home, he will cause that parish to wake up.

With Darwin, then, we anthropologists say: Let any and every portion of human history be studied in the light of the whole history of mankind, and against the background of the history of living things in general. It is the Darwinian outlook that

matters. None of Darwin's particular doctrines will necessarily endure the test of time and trial. Into the melting-pot must they go as often as any man of science deems it fitting. But Darwinism as the touch of nature that makes the whole world kin can hardly pass away. At any rate, anthropology stands or falls with the working hypothesis, derived from Darwinism, of a fundamental kinship and continuity amid change between all the forms of human life.

It remains to add that, hitherto, anthropology has devoted most of its attention to the peoples of rude—that is to say, of simple—culture, who are vulgarly known to us as "savages." The main reason for this, I suppose, is that nobody much minds so long as the darwinizing kind of history confines itself to outsiders. Only when it is applied to self and friends is it resented as an impertinence. But, although it has always up to now pursued the line of least resistance, anthropology does not abate one jot or tittle of its claim to be the whole science, in the sense of the whole history, of man. As regards the word, call it science, or history, or anthropology, or anything else-what does it matter? As regards the thing, however, there can be no compromise. We anthropologists are out to secure this: that there

shall not be one kind of history for savages and another kind for ourselves, but the same kind of history, with the same evolutionary principle running right through it, for all men, civilized and savage, present and past.

So much for the ideal scope of anthropology. Now, in the second place, for its ideal limitations. Here, I am afraid, we must touch for a moment on very deep and difficult questions. But it is well worth while to try at all costs to get firm hold of the fact that anthropology, though a big thing, is not everything.

It will be enough to insist briefly on the following points: that anthropology is science in whatever way history is science; that it is not philosophy, though it must conform to its needs; and that it is not policy, though it may subserve its designs.

Anthropology is science in the sense of specialized research that aims at truth for truth's sake. Knowing by parts is science, knowing the whole as a whole is philosophy. Each supports the other, and there is no profit in asking which of the two should come first. One is aware of the universe as the whole universe, however much one may be resolved to study its details one at a time. The scientific mood, however, is uppermost when one says: Here is a particular lot of

things that seem to hang together in a particular way; let us try to get a general idea of what that way is. Anthropology, then, specializes on the particular group of human beings, which itself is part of the larger particular group of living beings. Inasmuch as it takes over the evolutionary principle from the science dealing with the larger group, namely biology, anthropology may be regarded as a branch of biology. Let it be added, however, that, of all the branches of biology, it is the one that is likely to bring us nearest to the true meaning of life; because the life of human beings must always be nearer to human students of life than, say, the life of plants.

But, you will perhaps object, anthropology was previously identified with history, and now it is identified with science, namely, with a branch of biology? Is history science? The answer is, Yes. I know that a great many people who call themselves historians say that it is not, apparently on the ground that, when it comes to writing history, truth for truth's sake is apt to bring out the wrong results. Well, the doctored sort of history is not science, nor anthropology, I am ready to admit. But now let us listen to another and a more serious objection to the claim of history to be science. Science, it will be said

by many earnest men of science, aims at discovering laws that are clean out of time. History, on the other hand, aims at no more than the generalized description of one or another phase of a time-process. To this it may be replied that physics, and physics only, answers to this altogether too narrow conception of science. The laws of matter in motion are, or seem to be, of the timeless or mathematical kind. Directly we pass on to biology, however, laws of this kind are not to be discovered, or at any rate are not discovered. Biology deals with life, or, if you like, with matter as living. Matter moves. Life evolves. We have entered a new dimension of existence. The laws of matter in motion are not abrogated, for the simple reason that in physics one makes abstraction of life, or in other words leaves its peculiar effects entirely out of account. But they are transcended. They are multiplied by a, an unknown quantity. This being so from the standpoint of pure physics, biology takes up the tale afresh, and devises means of its own for describing the particular ways in which things hang together in virtue of their being alive. And biology finds that it cannot conveniently abstract away the reference to time. It cannot treat living things as machines. What does it do,

then? It takes the form of history. It states that certain things have changed in certain ways, and goes on to show, so far as it can, that the changes are on the whole in a certain direction. In short, it formulates tendencies, and these are its only laws. Some tendencies, of course, appear to be more enduring than others, and thus may be thought to approximate more closely to laws of the timeless kind. But w, the unknown quantity, the something or other that is not physical, runs through them all, however much or little they may seem to endure. For science, at any rate, which departmentalizes the world, and studies it bit by bit, there is no getting over the fact that living beings in general, and human beings in particular, are subject to an evolution which is simple matter of history.

And now what about philosophy? I am not going into philosophical questions here. For that reason I am not going to describe biology as natural history, or anthropology as the natural history of man. Let philosophers discuss what "nature" is going to mean for them. In science the word is question-begging; and the only sound rule in science is to beg as few philosophical questions as you possibly can. Everything in the world is natural, of course, in the sense that things are

somehow all akin—all of a piece. We are simply bound to take in the parts as parts of a whole, and it is just this fact that makes philosophy not only possible but inevitable. All the same, this fact does not prevent the parts from having their own specific natures and specific ways of behaving. The people who identify the natural with the physical are putting all their money on one specific kind of nature or behaviour that is to be found in the world. In the case of man they are backing the wrong horse. The horse to back is the horse that goes. As a going concern, however, anthropology, as part of evolutionary biology, is a history of vital tendencies which are not natural in the sense of merely physical.

What are the functions of philosophy as contrasted with science? Two. Firstly, it must be critical. It must police the city of the sciences, preventing them from interfering with each other's rights and free development. Co-operation by all means, as, for instance, between anthropology and biology. But no jumping other folks' claims and laying down the law for all; as, for instance, when physics would impose the kind of method applicable to machines on the sciences of evolving life. Secondly, philosophy must be synthetic. It must put all the ways of knowing together, and

likewise put these in their entirety together with all the ways of feeling and acting; so that there may result a theory of reality and of the good life, in that organic interdependence of the two which our very effort to put things together presupposes as its object.

What, then, are to be the relations between anthropology and philosophy? On the one hand, the question whether anthropology can help philosophy need not concern us here. That is for the philosopher to determine. On the other hand, philosophy can help anthropology in two ways: in its critical capacity, by helping it to guard its own claim, and develop freely without interference from outsiders; and in its synthetic capacity, perhaps, by suggesting the rule that, of two types of explanation, for instance, the physical and the biological, the more abstract is likely to be farther away from the whole truth, whereas, contrariwise, the more you take in, the better your chance of really understanding.

It remains to speak about policy. I use this term to mean any and all practical exploitation of the results of science. Sometimes, indeed, it is hard to say where science ends and policy begins, as we saw in the case of those gentlemen who would doctor their history, because practically it pays to have a good conceit of ourselves, and believe that our side always wins its battles. Anthropology, however, would borrow something besides the evolutionary principle from biology, namely, its disinterestedness. It is not hard to be candid about bees and ants; unless, indeed, one is making a parable of them. But as anthropologists we must try, what is so much harder, to be candid about ourselves. Let us look at ourselves as if we were so many bees and ants, not forgetting, of course, to make use of the inside information that in the case of the insects we so conspicuously lack.

This does not mean that human history, once constructed according to truth-regarding principles, should and could not be used for the practical advantage of mankind. The anthropologist, however, is not, as such, concerned with the practical employment to which his discoveries are put. At most, he may, on the strength of a conviction that truth is mighty and will prevail for human good, invite practical men to study his facts and generalizations in the hope that, by knowing mankind better, they may come to appreciate and serve it better. For instance, the administrator, who rules over savages, is almost invariably quite well-meaning, but not seldom utterly ignorant of native customs and beliefs.

So, in many cases, is the missionary, another type of person in authority, whose intentions are of the best, but whose methods too often leave much to be desired. No amount of zeal will suffice, apart from scientific insight into the conditions of the practical problem. And the education is to be got by paying for it. But governments and churches, with some honourable exceptions, are still wofully disinclined to provide their probationers with the necessary special training: though it is ignorance that always proves most costly in the long run. Policy, however, including bad policy, does not come within the official cognizance of the anthropologist. Yet it is legitimate for him to hope that, just as for many years already physiological science has indirectly subserved the art of medicine, so anthropological science may indirectly, though none the less effectively, subserve an art of political and religious healing in the days to come.

The third and last part of this chapter will show how, under modern conditions of science and education, anthropology is to realize its programme. Hitherto, the trouble with anthropologists has been to see the wood for the trees. Even whilst attending mainly to the peoples of rude culture, they have heaped

together facts enough to bewilder both themselves and their readers. The time has come to do some sorting; or rather the sorting is doing itself. All manner of groups of special students, interested in some particular side of human history, come now-a-days to the anthropologist, asking leave to borrow from his stock of facts the kind that they happen to want. Thus he, as general storekeeper, is beginning to acquire, almost unconsciously, a sense of order corresponding to the demands that are made upon him. The goods that he will need to hand out in separate batches are being gradually arranged by him on separate shelves. Our best way, then, of proceeding with the present inquiry, is to take note of these shelves. In other words, we must consider one by one the special studies that claim to have a finger in the anthropological pie.

Or, to avoid the disheartening task of reviewing an array of bloodless "-ologies," let us put the question to ourselves thus: Be it supposed that a young man or woman who wants to take a course, of at least a year's length, in the elements of anthropology, joins some university which is thoroughly in touch with the scientific activities of the day. A university, as its very name implies, ought to be an all-embracing assemblage of higher

studies, so adjusted to each other that, in combination, they provide beginners with a good general education; whilst, severally, they offer to more advanced students the opportunity of doing this or that kind of specific research. In such a well-organized university, then, how would our budding anthropologist proceed to form a preliminary acquaintance with the four corners of his subject? What departments must he attend in turn? Let us draw him up a curriculum, praying meanwhile that the multiplicity of the demands made upon him will not take away his breath altogether. Man is a many-sided being; so there is no help for it if anthropology also is many-sided.

For one thing, he must sit at the feet of those whose particular concern is with prehistoric man. It is well to begin here, since thus will the glamour of the subject sink into his soul at the start. Let him, for instance, travel back in thought to the Europe of many thousands of years ago, shivering under the effects of the great ice-age, yet populous with human beings so far like ourselves that they were alive to the advantage of a good fire, made handy tools out of stone and wood and bone, painted animals on the walls of their caves, or engraved them on mammothivory, far more skilfully than most of us could

do now, and buried their dead in a ceremonial way that points to a belief in a future life. Thus, too, he will learn betimes how to blend the methods and materials of different branches of science. A human skull, let us say, and some bones of extinct animals, and some chipped flints are all discovered side by side some twenty feet below the level of the soil. At least four separate authorities must be called in before the parts of the puzzle can be fitted together.

Again, he must be taught something about race, or inherited breed, as it applies to man. A dose of practical anatomy—that is to say, some actual handling and measuring of the principal portions of the human frame in its leading varieties—will enable our beginner to appreciate the differences of outer form that distinguish, say, the British colonist in Australia from the native "black-fellow," or the whites from the negroes, and redskins. and vellow Asiatics in the United States. At this point, he may profitably embark on the details of the Darwinian hypothesis of the descent of man. Let him search amongst the manifold modern versions of the theory of human evolution for the one that comes nearest to explaining the degrees of physical likeness and unlikeness shown by men in general as compared with the animals, especially the man-like apes; and again, those shown by the men of divers ages and regions as compared with each other. Nor is it enough for him, when thus engaged, to take note simply of physical features—the shape of the skull, the colour of the skin, the tint and texture of the hair, and so on. There are likewise mental characters that seem to be bound up closely with the organism and to follow the breed. Such are the so-called instincts, the study of which should be helped out by excursions into the mind-history of animals, of children, and of the insane. Moreover, the measuring and testing of mental functions, and, in particular, of the senses, is now-a-days carried on by means of all sorts of ingenious instruments; and some experience of their use will be all to the good, when problems of descent are being tackled.

Further, our student must submit to a thorough grounding in world-geography with its physical and human sides welded firmly together. He must be able to pick out on the map the headquarters of all the more notable peoples, not merely as they are now, but also as they were at various outstanding moments of the past. His next business is to master the main facts about the natural conditions to which each people is subjected—the climate, the conformation of land and

sea, the animals and plants. From here it is but a step to the economic life—the foodsupply, the clothing, the dwelling-places, the principal occupations, the implements labour. A selected list of books of travel must be consulted. No less important is it to work steadily through the show-cases of a good ethnological museum. Nor will it suffice to have surveyed the world by regions. The communications between regions—the migrations and conquests, the trading and the borrowing of customs-must be traced and accounted for. Finally, on the basis of their distribution, which the learner must chart out for himself on blank maps of the world, the chief varieties of the useful arts and appliances of man can be followed from stage to stage of their development.

Of the special studies concerned with man, the next in order might seem to be that which deals with the various forms of human society; since, in a sense, social organization must depend directly on material circumstances. In another and perhaps a deeper sense, however, the prime condition of true sociality is something else, namely, the exclusively human gift of articulate speech. To what extent, then, must our novice pay attention to the history of language? Speculation about its far-off origins is now-a-days rather out of

fashion. Moreover, language is no longer supposed to provide, by itself at any rate, and apart from other clues, a key to the endless riddles of racial descent. What is most needed, then, is rather some elementary instruction concerning the organic connection between language and thought, and concerning their joint development as viewed against the background of the general development of society. And, just as words and thoughts are essentially symbols, so there are also gesture-symbols and written symbols, whilst again another set of symbols is in use for counting. All these pre-requisites of human intercourse may be conveniently taken together.

Coming now to the analysis of the forms of society, the beginner must first of all face the problem: "What makes a people one?" Neither blood, nor territory, nor language, but only the fact of being more or less compactly organized in a political society, will be found to yield the unifying principle required. Once the primary constitution of the body politic has been made out, a limit is set up, inside of which a number of fairly definite forms of grouping offer themselves for examination; whilst outside of it various social relationships of a vaguer kind have also to be considered. Thus, amongst institutions of

the internal kind, the family by itself presents a wide field of research; though in certain cases it is liable to be overshadowed by some other sort of organization, such as, notably, the clan. Under the same rubric fall the many forms of more or less voluntary association, economic, religious, and so forth. On the other hand, outside the circle of the body politic there are, at all known stages of society, mutual understandings that regulate war, trade, travel, the celebration of common rites, the interchange of ideas. Here, then, is an abundance of types of human association, to be first scrutinized separately, and afterwards considered in relation to each other.

Closely connected with the previous subject is the history of law. Every type of association, in a way, has its law, whereby its members are constrained to fulfil a certain set of obligations. Thus our student will pass on straight from the forms of society to the most essential of their functions. The fact that, amongst the less civilized peoples, the law is uncodified and merely customary, whilst the machinery for enforcing it is, though generally effective enough, yet often highly indefinite and occasional, makes the tracing of the growth of legal institutions from their rudiments no less vitally important, though it makes it none the easier. The

history of authority is a strictly kindred topic. Legislating and judging on the one hand, and governing on the other, are different aspects of the same general function. In accordance, then, with the order already indicated, law and government as administered by the political society in the person of its representatives, chiefs, elders, war-lords, priest-kings, and so forth, must first be examined; then the jurisdiction and discipline of subordinate bodies, such as the family and the clan, or again the religious societies, trade guilds, and the rest; then, lastly, the international conventions, with the available means of ensuring their observance.

Again, the history of religion is an allied theme of far-reaching interest. For the understanding of the ruder forms of society it may even be said to furnish the master-key. At this stage, religion is the mainstay of law and government. The constraining force of custom makes itself felt largely through a magnifying haze of mystic sanctions; whilst, again, the position of a leader of society rests for the most part on the supernormal powers imputed to him. Religion and magic, then, must be carefully studied if we would understand how the various persons and bodies that exercise authority are assisted, or else hindered, in their efforts to maintain social

discipline. Apart from this fundamental inquiry, there is another, no less important in its way, to which the study of religion and magic opens up a path. This is the problem how reflection manages as it were to double human experience, by setting up beside the outer world of sense an inner world of thought-relations. Now constructive imagination is the queen of those mental functions which meet in what we loosely term "thought"; and imagination is ever most active where, on the outer fringe of the mind's routine work, our inarticulate questionings radiate into the unknown. When the genius has his vision, almost invariably, among the ruder peoples, it is accepted by himself and his society as something supernormal and sacred, whether its fruit be an act of leadership or an edict, a practical invention or a work of art, a story of the past or a prophecy, a cure or a devastating curse. Moreover, social tradition treasures the memory of these revelations, and, blending them with the contributions of humbler folk-for all of us dream our dreams-provides in myth and legend and tale, as well as in manifold other art-forms, a stimulus to the inspiration of future generations. For most purposes fine art, at any rate during its more rudimentary stages, may be studied in connection with religion.

So far as law and religion will not account for the varieties of social behaviour, the novice may most conveniently consider them under the head of morals. The forms of social intercourse, the fashions, the festivities, are imposed on us by our fellows from without, and none the less effectively because as a general rule we fall in with them as a matter The difference between manners and morals of the higher order is due simply to the more pressing need, in the case of our most serious duties, of a reflective sanction, a "moral sense," to break us in to the common service. It is no easy task to keep legal and religious penalties or rewards out of the reckoning, when trying to frame an estimate of what the notions of right and wrong, prevalent in a given society, amount to in themselves; nevertheless, it is worth doing, and valuable collections of material exist to aid the work. The facts about education, which even amongst rude peoples is often carried on far into manhood, throw much light on this problem. So do the moralizings embodied in the traditional lore of the folk—the proverbs, the beast-fables, the stories of heroes.

There remains the individual to be studied in himself. If the individual be ignored by social science, as would sometimes appear to be the case, so much the worse for social

science, which, to a corresponding extent. falls short of being truly anthropological. Throughout the history of man, our beginner should be on the look-out for the signs, and the effects, of personal initiative. Freedom of choice, of course, is limited by what there is to choose from; so that the development of what may be termed social opportunity should be concurrently reviewed. Again, it is the aim of every moral system so to educate each man that his directive self may be as far as possible identified with his social self. Even suicide is not a man's own affair. according to the voice of society which speaks in the moral code. Nevertheless, lest the important truth be overlooked that social control implies a will that must meet the control half-way, it is well for the student of man to pay separate and special attention to the individual agent. The last word in anthropology is: Know thyself.

### CHAPTER II

#### ANTIQUITY OF MAN

HISTORY, in the narrower sense of the word, depends on written records. As we follow back history to the point at which our written

records grow hazy, and the immediate ancestors or predecessors of the peoples who appear in history are disclosed in legend that needs much eking out by the help of the spade, we pass into proto-history. At the back of that, again, beyond the point at which written records are of any avail at all, comes prehistory.

How, then, you may well inquire, does the pre-historian get to work? What is his method of linking facts together? And what are the sources of his information?

First, as to his method. Suppose a number of boys are in a field playing football, whose superfluous garments are lying about everywhere in heaps; and suppose you want, for some reason, to find out in what order the boys arrived on the ground. How would you set about the business? Surely you would go to one of the heaps of discarded clothes, and take note of the fact that this boy's jacket lay under that boy's waistcoat. Moving on to other heaps you might discover that in some cases a boy had thrown down his hat on one heap, his tie on another, and so on. would help you all the more to make out the general series of arrivals. Yes, but what if some of the heaps showed signs of having been upset? Well, you must make allowances for these disturbances in your calculations. Of course, if some one had deliberately made hay with the lot, you would be non-plussed. The chances are, however, that, given enough heaps of clothes, and bar intentional and systematic wrecking of them, you would be able to make out pretty well which boy preceded which; though you could hardly go on to say with any precision whether Tom preceded Dick by half a minute or half an hour.

Such is the method of pre-history. It is called the stratigraphical method, because it is based on the description of strata, or

layers.

Let me give a simple example of how strata tell their own tale. It is no very remarkable instance, but happens to be one that I have examined for myself. They were digging out a place for a gas-holder in a meadow in the town of St. Helier, Jersey, and carried their borings down to bed rock at about thirty feet. which roughly coincides with the present mean sea-level. The modern meadow-soil went down about five feet. Then came a bed of moss-peat, one to three feet thick. There had been a bog here at a time which, to judge by similar finds in other places, was just before the beginning of the bronze-age. Underneath the moss-peat came two or three feet of silt with sea-shells in it. Clearly the

island of Jersey underwent in those days some sort of submergence. Below this stratum came a great peat-bed, five to seven feet thick, with large tree-trunks in it, the remains of a fine forest that must have needed more or less elevated land on which to grow. In the peat was a weapon of polished stone, and at the bottom were two pieces of pottery, one of them decorated with little pitted marks. These fragments of evidence are enough to show that the foresters belonged to the early neolithic period, as it is called. Next occurred about four feet of silt with sea-shells, marking another advance of the sea. Below that, again, was a mass, six to eight feet deep, of the characteristic yellow clay with far-carried fragments of rock in it that is associated with the great floods of the ice-age. The land must have been above the reach of the tide for the glacial drift to settle on it. Finally, three or four feet of blue clay resting immediately on bed-rock were such as might be produced by the sea, and thus probably betokened its presence at this level in the still remoter past.

Here the strata are mostly geological. Man only comes in at one point. I might have taken a far more striking case—the best I know—from St. Acheul, a suburb of Amiens in the north of France. Here M. Commont found human implements of distinct types in about

eight out of eleven or twelve successive geological layers. But the story would take too long to tell. However, it is well to start with an example that is primarily geological. For it is the geologist who provides the prehistoric chronometer. Pre-historians have to reckon in geological time—that is to say, not in years, but in ages of indefinite extent corresponding to marked changes in the condition of the earth's surface. It takes the plain man a long time to find out that it is no use asking the pre-historian, who is proudly displaying a skull or a stone implement, "Please, how many years ago exactly did its owner live?" I remember hearing such a question put to the great savant, M. Cartailhac, when he was lecturing upon the pre-historic drawings found in the French and Spanish caves; and he replied, "Perhaps not less than 6,000 years ago and not more than 250,000." The backbone of our present system of determining the series of prehistoric epochs is the geological theory of an ice-age comprising a succession of periods of extreme glaciation punctuated by milder intervals. It is for the geologists to settle in their own way, unless, indeed, the astronomers can help them, why there should have been an ice-age at all; what was the number, extent, and relative duration of its ups and

downs; and at what time, roughly, it ceased in favour of the temperate conditions that we now enjoy. The pre-historians, for their part, must be content to make what traces they discover of early man fit in with this pre-established scheme, uncertain as it is. Every day, however, more agreement is being reached both amongst themselves and between them and the geologists; so that one day, I am confident, if not exactly to-morrow, we shall know with fair accuracy how the boys, who left their clothes lying about, followed one another into the field.

Sometimes, however, geology does not, on the face of it, come into the reckoning. Thus I might have asked the reader to assist at the digging out of a cave, say, one of the famous group of caves near Mentone, on the Riviera, just at the south-eastern corner of France. These caves were inhabited by man during an immense stretch of time, and, as you dig down, you light upon one layer after another of his leavings But note in such a case as this how easily you may be baffled by some one having upset the heap of clothes, or, in a word, by rearrangement. Thus the man whose leavings ought to form the layer half-way up may have seen fit to dig a deep hole in the cave-floor in order to bury a deceased friend, and with him, let us suppose, to bury also an assortment of articles likely to be useful in the life beyond the grave. Consequently an implement of one age will be found lying cheek by jowl with the implement of a much earlier age, or even, it may be, some feet below it. Thereupon the pre-historian must fall back on the general run, or type, in assigning the different implements each to its own stratum. Luckily, in the old days fashions tended to be rigid; so that for the pre-historian two flints with slightly different chipping may stand for separate ages of culture as clearly as do a Greek vase and a German beer-mug for the student of more recent times.

Enough concerning the stratigraphical method. A word, in the next place, about the pre-historian's main sources of information. Apart from geological facts, there are three main classes of evidence that serve to distinguish one pre-historic epoch from another. These are animal bones, human bones, and human handiwork.

Again I illustrate by means of a case of which I happen to have first-hand knowledge. In Jersey, near the bay of St. Brelade, is a cave, in which we dug down through some twenty feet of accumulated clay and rockrubbish, presumably the effects of the last throes of the ice-age, and came upon a pre-

historic hearth. There were the big stones that had propped up the fire, and there were the ashes. By the side were the remains of a heap of food-refuse. The pieces of decayed bone were not much to look at; yet, submitted to an expert, they did a tale unfold. He showed them to be the remains of the woolly rhinoceros, the mammoth's even more unwieldy comrade, of the reindeer, of two kinds of horse, one of them the pony-like wild horse still to be found in the Mongolian deserts, of the wild ox, and of the deer. Truly there was better hunting to be got in Jersey in the days when it formed part of a frozen continent.

Next, the food-heap yields thirteen of some-body's teeth. Had they eaten him? It boots not to inquire; though, as the owner was aged between twenty and thirty, the teeth could hardly have fallen out of their own accord. Such grinders as they are too! A second expert declares that the roots beat all records. They are of the kind that goes with an immensely powerful jaw, needing a massive brow-ridge to counteract the strain of the bite, and in general involving the type of skull known as the Neanderthal, big-brained enough in its way, but uncommonly ape-like all the same.

Finally, the banqueters have left plenty of their knives lying about. These good folk had their special and regular way of striking off a broad flat flake from the flint core; the cores are lying about, too, and with luck you can restore some of the flakes to their original position. Then, leaving one side of the flake untouched, they trimmed the surface of the remaining face, and, as the edges grew blunt with use, kept touching them up with the hammer-stone—there it is also lying by the hearth—until, perhaps, the flake loses its oval shape and becomes a pointed triangle. A third expert is called in, and has no difficulty in recognizing these knives as the characteristic handiwork of the epoch known as the Mousterian. If one of these worked flints from Jersey was placed side by side with another from the cave of Le Moustier, near the right bank of the Vezère in south-central France. whence the term Mousterian, you could hardly tell which was which; whilst you would still see the same family likeness if you compared the Jersey specimens with some from Amiens, or from Northfleet on the Thames, or from Icklingham in Suffolk.

Putting all these kinds of evidence together, then, we get a notion, doubtless rather meagre, but as far as it goes well-grounded, of a hunter of the ice-age, who was able to get the better of a woolly rhinoceros, could cook a lusty steak off him, had a sharp knife to carve it, and the teeth to chew it, and generally knew how, under the very chilly circumstances, both to make himself comfortable and to keep his race going.

There is one other class of evidence on which the pre-historian may with due caution draw, though the risks are certain and the profits uncertain. The ruder peoples of to-day are living a life that in its broad features cannot be wholly unlike the life of the men of long Thus the pre-historian should study Spencer and Gillen on the natives of Central Australia, if only that he may take firm hold of the fact that people with skulls inclining towards the Neanderthal type, and using stone knives, may nevertheless have very active minds; in short, that a rich enough life in its way may leave behind it a poor rubbishheap. When it comes, however, to the borrowing of details, to patch up the holes in the pre-historic record with modern rags and tatters makes better literature than science. After all, the Australians, or Tasmanians, or Bushmen, or Eskimo, of whom so much is beginning to be heard amongst pre-historians, are our contemporaries—that is to say, have just as long an ancestry as ourselves; and in the course of the last 100,000 years or so our stock has seen so many changes, that their stocks may possibly have seen a few also. Yet

the real remedy, I take it, against the misuse of analogy is that the student should make himself sufficiently at home in both branches of anthropology to know each of the two things he compares for what it truly is.

Having glanced at method and sources, I pass on to results. Some text-book must be consulted for the long list of pre-historic periods required for western Europe, not to mention the further complications caused by bringing in the remaining portions of the world. The stone-age, with its three great divisions, the eolithic (eds, Greek for dawn, and lithos, stone), the palæolithic (palæos, old), and the neolithic (neos, new), and their numerous subdivisions, comes first; then the age of copper and bronze; and then the early iron-age, which is about the limit of protohistory. Here I shall confine my remarks to Europe. I am not going far afield into such questions as: Who were the mound-builders of North America? And are the Calaveras skull and other remains found in the goldbearing gravels of California to be reckoned amongst the earliest traces of man in the globe? Nor, again, must I pause to speculate whether the dark-stained lustrous flint implements discovered by Mr. Henry Balfour at a high level below the Victoria Falls, and possibly deposited there by the river Zambezi before it had carved the present gorge in the solid basalt, prove that likewise in South Africa man was alive and busy untold thousands of years ago. Also, I shall here confine myself to the stone-age, because my object is chiefly to illustrate the long pedigree of the species from which we are all sprung.

The antiquity of man being my immediate theme. I can hardly avoid saving something about eoliths: though the subject is one that invariably sets pre-historians at each other's throats. There are eoliths and eoliths, however: and some of M. Rutot's Belgian examples are now-a-days almost reckoned respectable. Let us, nevertheless, inquire whether eoliths are not to be found nearer home. I can wish the reader no more delightful experience than to run down to Ightham in Kent, and pay a call on Mr. Benjamin Harrison. In the room above what used to be Mr. Harrison's grocery-store, eoliths beyond all count are on view, which he has managed to amass in his rare moments of leisure. As he lovingly cons the stones over, and shows off their points, his enthusiasm is likely to prove catching. But the visitor, we shall suppose, is sceptical. Very good; it is not far, though a stiffish pull, to Ash on the top of the North Downs. Hereabouts are Mr. Harrison's

hunting-grounds. Over these stony tracts he has conducted Sir Joseph Prestwich and Sir John Evans, to convince the one authority. but not the other. Mark this pebbly drift of rusty-red colour spread irregularly along the fields, as if the relics of some ancient stream or flood. On the surface, if you are lucky, you may pick up an unquestionable palæolith of early type, with the rusty-red stain of the gravel over it to show that it has lain there for ages. But both on and below the surface, the gravel being perhaps from five to seven feet deep, another type of stone occurs, the so-called colith. It is picked out from amongst ordinary stones partly because of its shape, and partly because of rough and much-worn chippings that suggest the hand of art or of nature, according to your turn of mind. Take one by itself, explains Mr. Harrison, and you will be sure to rank it as ordinary road-metal. But take a series together, and then, he urges, the sight of the same forms over and over again will persuade you in the end that human design, not aimless chance, has been at work here.

Well, I must leave Mr. Harrison to convert you into the friend or foe of his eoliths, and will merely add a word in regard to the probable age of these eolith-bearing gravels. Sir Joseph Prestwich has tried to work the problem out. Now-a-days Kent and Sussex run eastwards in five more or less parallel ridges, not far short of 1,000 feet high, with deep valleys between. Formerly, however, no such valleys existed, and a great dome of chalk, some 2,500 feet high at its crown, perhaps, though others would say less, covered the whole country. That is why rivers like the Darenth and Medway cut clean through the North Downs and fall into the Thames. instead of flowing eastwards down the later valleys. They started to carve their channels in the soft chalk in the days gone by, when the watershed went north and south down the slopes of the great dome. And the red gravels with the eoliths in them, concludes Prestwich. must have come down the north slope whilst the dome was still intact: for they contain fragments of stone that hail from right across the present valleys. But, if the coliths are man-made, then man presumably killed game and cut it up on top of the Wealden dome, how many years ago one trembles to think.

Let us next proceed to the subject of palæoliths. There is, at any rate, no doubt about them. Yet, rather more than half a century ago, when Boucher de Perthes found palæoliths in the gravels of the Somme at Abbeville, and was among the first to

recognize them for what they are, there was no small scandal. Now-a-days, however, the world takes it as a matter of course that those lumpish, discoloured, and much-rolled stones, shaped something like a pear, which come from the high terraces deposited by the Ancient Thames, were once upon a time the weapons or tools of somebody who had plenty of muscle in his arm. Plenty of skill he had in his fingers, too; for to chip a flintpebble along both faces, till it takes a more or less symmetrical and standard shape, is not so easy as it sounds. Hammer away yourself at such a pebble, and see what a mess you make of it. To go back for one moment to the subject of eoliths, we may fairly argue that experimental forms still ruder than the much-trimmed palæoliths of the early riverdrift must exist somewhere, whether Mr. Harrison's coliths are to be classed amongst them or not. Indeed, the Tasmanians of modern days carved their simple tools so roughly, that any one ignorant of their history might easily mistake the greater number for common pieces of stone. On the other hand, as we move on from the earlier to the later types of river-drift implements, we note how by degrees practice makes perfect. The forms grow ever more regular and refined, up to the point of time which has

been chosen as the limit for the first of the three main stages into which the vast palæolithic epoch has to be broken up. The man of the late St. Acheul period, as it is termed, was truly a great artist in his way. If you stare vacantly at his handiwork in a museum. you are likely to remain cold to its charm. But probe about in a gravel-bed till you have the good fortune to light on a masterpiece: tenderly smooth away with your fingers the dirt sticking to its surface, and bring to view the tapering or oval outline, the straight edge, the even and delicate chipping over both faces; then, wrapping it carefully in your handkerchief, take it home to wash, and feast till bedtime on the clean feel and shining mellow colour of what is hardly more an implement than a gem. They took a pride in their work, did the men of old; and, until you can learn to sympathize, you are no anthropologist.

During the succeeding main stage of the palæolithic epoch there was a decided set-back in the culture, as judged by the quality of the workmanship in flint. Those were the days of the Mousterians who dined off woolly rhinoceros in Jersey. Their stone implements, worked only on one face, are poor things by comparison with those of late St. Acheul days, though for a time degenerated forms of the

latter seem to have remained in use. What had happened? We can only guess. Probably something to do with the climate was at the bottom of this change for the worse. Thus M. Rutot believes that during the ice-age each big freeze was followed by an equally big flood, preceding each fresh return of milder weather. One of these floods, he thinks, must have drowned out the neat-fingered race of St. Acheul, and left the coast clear for the Mousterians with their coarser type of culture. Perhaps they were coarser in their physical type as well.<sup>1</sup>

To the credit of the Mousterians, however, must be set down the fact that they are associated with the habit of living in caves, and perhaps may even have started it; though some implements of the drift type occur in Le Moustier itself, as well as in other caves, such as the famous Kent's Cavern near Torquay. Climate, once more, has very possibly to answer for having thus driven man underground. Anyway, whether because they

¹ Theirs was certainly the rather ape-like Neanderthal build. If, however, the skull found at Galley Hill, near Northfleet in Kent, amongst the gravels laid down by the Thames when it was about ninety feet above its present level, is of early palæolithic date, as some good authorities believe, there was a kind of man away back in the driftperiod who had a fairly high forehead and moderate brow-ridges, and in general was a less brutal specimen of humanity than our Mousterian friend of the large grinders.

must, or because they liked it, the Mousterians went on with their cave life during an immense space of time, making little progress; unless it were to learn gradually how to sharpen bones into implements. But caves and bones alike were to play a far more striking part in the days immediately to follow.

The third and last main stage of the palæolithic epoch developed by degrees into a golden age of art. But I cannot dwell on all its glories. I must pass by the beautiful work in flint: such as the thin blades of laurel-leaf pattern, fairly common in France but rare in England, belonging to the stage or type of culture known as the Solutrian (from Solutré in the department of Saône-et-Loire). must also pass by the exquisite French examples of the carvings or engravings of bone and ivory; a single engraving of a horse's head, from the cave at Creswell Crags in Derbyshire, being all that England has to offer in this line. Any good museum can show you specimens or models of these delightful objects; whereas the things about which I am going to speak must remain hidden away for ever where their makers left them-I mean the paintings and engravings on the walls of the French and Spanish caves.

I invite you to accompany me in the spirit first of all to the cave of Gargas near Aventignan,

under the shadow of the Pic du Midi in the High Pyrenees. Half-way up a hill, in the midst of a wilderness of rocky fragments, the relics of the ice-age, is a smallish hole, down which we clamber into a spacious but lowroofed grotto, stretching back five hundred feet or so into infinite darkness. Hard by the mouth, where the light of day freely enters, are the remains of a hearth, with bonerefuse and discarded implements mingling with the ashes to a considerable depth. A glance at these implements, for instance the small flint scraper with narrow high back and perpendicular chipping along the sides, is enough to show that the men who once warmed their fingers here were of the so-called Aurignacian type (Aurignac in the department of Haute Garonne, in southern France), that is to say, lived somewhere about the dawn of the third stage of the paleolithic epoch. Directly after their disappearance nature would seem to have sealed up the cave again until our time, so that we can study them here all by themselves.

Now let us take our lamps and explore the secrets of the interior. The icy torrents that hollowed it in the limestone have eaten away rounded alcoves along the sides. On the white surface of these, glazed over with a preserving film of stalactite, we at once notice

the outlines of many hands. Most of them are left hands, showing that the Aurignacians tended to be right-handed, like ourselves, and dusted on the paint, black manganese or red ochre, between the outspread fingers in just the way that we, too, would find convenient. Curiously enough, this practice of stencilling hands upon the walls of caves is in vogue amongst the Australian natives; though, unfortunately, they keep the reason, if there is any deeper one than mere amusement, strictly to themselves. Like the Australians, again, and other rude peoples, these Aurignacians would appear to have been given to lopping off an occasional finger—from some religious motive, we may guess—to judge from the mutilated look of a good many of the handprints.

The use of paint is here limited to this class of wall-decoration. But a sharp flint makes an excellent graving tool; and the Aurignacian hunter is bent on reproducing by this means the forms of those game-animals about which he doubtless dreams night and day. His efforts in this direction, however, rather remind us of those of our infant-schools. Look at this bison. His snout is drawn sideways, but the horns branch out right and left as if in a full-face view. Again, our friend scamps details such as the legs. Sheer want

of skill, we may suspect, leads him to construct what is more like the symbol of something thought than the portrait of something seen. And so we wander farther and farther into the gloomy depths, adding ever new specimens to our pre-historic menagerie, including the rare find of a bird that looks uncommonly like the Great Auk. Mind, by the way, that you do not fall into that round hole in the floor. It is enormously deep; and more than forty cave-bears have left their skeletons at the bottom, amongst which your skeleton would be a little out of place.

Next day let us move off eastwards to the Little Pyrenees to see another cave, Niaux, high up in a valley scarred nearly up to the top by former glaciers. This cave is about a mile deep; and it will take you half a mile of awkward groping amongst boulders and stalactites, not to mention a choke in one part of the passage such as must puzzle a fat man, before the cavern becomes spacious, and you find yourself in the vast underground cathedral that pre-historic man has chosen for his picturegallery. This was a later stock, that had in the meantime learnt how to draw to perfection. Consider the bold black and white of that portrait of a wild pony, with flowing mane and tail, glossy barrel, and jolly snubnosed face. It is four or five feet across, and

not an inch of the work is out of scale. The same is true of nearly every one of the other fifty or more figures of game-animals. These artists could paint what they saw.

Yet they could paint up on the walls what they thought, too. There are likewise whole screeds of symbols waiting, perhaps waiting for ever, to be interpreted. The dots and lines and pothooks clearly belong to a system of picture-writing. Can we make out their meaning at all? Once in a way, perhaps. Note these marks looking like two different kinds of throwing-club; at any rate, there are Australian weapons not unlike them. left of them are a lot of dots in what look like patterns, amongst which we get twice over the scheme of one dot in the centre of a circle of others. Then, farther still to the left. comes the painted figure of a bison; or, to be more accurate, the front half is painted, the back being a piece of protruding rock that gives the effect of low relief. The bison is rearing back on its haunches, and there is a patch of red paint, like an open wound, just over the region of its heart. Let us try to read the riddle. It may well embody a charm "With these that ran somewhat thus: weapons, and by these encircling tactics, may we slay a fat bison, O ye powers of the dark!" Depend upon it, the men who went half a mile

into the bowels of a mountain, to paint things up on the walls, did not do so merely for fun. This is a very eerie place, and I daresay most of us would not like to spend the night there alone: though I know a pre-historian who did. In Australia, as we shall see later on, rockpaintings of game-animals, not so lifelike as these of the old days, but symbolic almost beyond all recognizing, form part of solemn ceremonies whereby good hunting is held to be secured. Something of the sort, then, we may suppose, took place ages ago in the cave of Niaux. So, indeed, it was a cathedral after a fashion; and, having in mind the carven pillars of stalactite, the curving alcoves and side-chapels, the shining white walls, and the dim ceiling that held in scorn our powerful lamps, I venture to question whether man has ever lifted up his heart in a grander one.

Space would fail me if I now sought to carry you off to the cave of Altamira, near Santander, in the north-west of Spain. Here you might see at its best a still later style of rock-painting, which deserts mere black and white for colour-shading of the most free description. Indeed, it is almost too free, in my judgment; for, though the control of the artist over his rude material is complete, he is inclined to turn his back on real life,

forcing the animal forms into attitudes more striking than natural, and endowing their faces sometimes, as it seems to me, with almost human expressions. Whatever may be thought of the likelihood of these beasts being portrayed to look like men, certain it is that in the painted caves of this period the men almost invariably have animal heads, as if they were mythological beings, half animal and half human; or else—as perhaps is more probable-masked dancers. At one place, however—namely, in the rock shelter of Cogul near Lerida, on the Spanish side of the Pyrenees, we have a picture of a group of women dancers who are not masked, but attired in the style of the hour. They wear high hats or chignons, tight waists, and bell-shaped skirts. Really, considering that we thus have a contemporary fashion-plate, so to say, whilst there are likewise the numerous stencilled hands elsewhere on view, and even, as I have seen with my own eyes at Niaux in the sandy floor, hardened over with stalagmite, the actual print of a foot, we are brought very near to our palæolithic forerunners; though indefinite ages part them from us if we reckon by sheer time.

Before ending this chapter, I have still to make good a promise to say something about the neolithic men of western Europe. These people often, though not always, polished their stone; the palæolithic folk did not. That is the distinguishing mark by which the world is pleased to go. It would be fatal to forget, however, that, with this trifling difference, go many others which testify more clearly to the contrast between the older and newer types of culture. Thus it has still to be proved that the palæolithic races ever used pottery, or that they domesticated animals—for instance, the fat ponies which they were so fond of eating; or that they planted crops. All these things did the neolithic peoples sooner or later; so that it would not be strange if palæolithic man withdrew in their favour, because he could not compete. Pre-history is at present almost silent concerning the manner of his passing. In a damp and draughty tunnel, however, called Mas d'Azil, in the south of France, where the river Arize still bores its way through a mountain, some palæolithic folk seem to have lingered on in a sad state of decay. The old sureness of touch in the matter of carving bone had left them. Again, their painting was confined to the adorning of certain pebbles with spots and lines, curious objects, that perhaps are not without analogy in Australia, whilst something like them crops

up again in the north of Scotland in what seems to be a very early period. Had the rest of the palæolithic men already followed the reindeer and other arctic animals towards the north-east? Or did the neolithic invasion, which came from the south, wipe out the lot? Or was there a commingling of stocks, and may some of us have a little dose of palæolithic blood, as we certainly have a large dose of neolithic? To all these questions it can only be replied that we do not yet know.

No more do we know half as much as we should like about fifty things relating to the small, dark, long-headed neolithic folk, with a language that has possibly left traces in the modern Basque, who spread over the west till they reached Great Britain-it probably was an island by this time-and erected the well-known long barrows and other monuments of a megalithic (great-stone) type; though not the round barrows, which are the work of a subsequent round-headed race of the bronze-age. Every day, however, the spade is adding to our knowledge. Besides, most of the ruder peoples of the modern world were at the neolithic stage of culture at the time of their discovery by Europeans. Hence the weapons, the household utensils, the pottery, the pile-dwellings, and so on, can be compared closely; and we have a fresh instance of the way in which one branch of anthropology can aid another.

In pursuance of my plan, however, of merely pitching here and there on an illustrative point, I shall conclude by an excursion to Brandon, just on the Suffolk side of the border between that county and Norfolk. Here we can stand, as it were, with one foot in neolithic times and the other in the life of to-day. When Canon Greenwell, in 1870, explored in this neighbourhood one of the neolithic flintmines known as Grime's Graves, he had to dig out the rubbish from a former funnel-shaped pit some forty feet deep. Down at this level, it appeared, the neolithic worker had found the layer of the best flint. This he quarried by means of narrow galleries in all directions. For a pick he used a red-deer's antler. In the British Museum is to be seen one of these with the miner's thumb-mark stamped on a piece of clay sticking to the handle. His lamp was a cup of chalk. His ladder was probably a series of rough steps cut in the sides of the pit As regards the use to which the material was put, a neolithic workshop was found just to the south of Grime's Graves. scattered about on all sides, were the cores, the hammer-stones that broke them up, and knives, scrapers, borers, spear-heads and arrow-heads galore, in all stages of manufacture.

Well, now let us hie to Lingheath, not far off, and what do we find? A family of the name of Dyer carry on to-day exactly the same old method of mining. Their pits are of squarer shape than the neolithic ones, but otherwise similar. Their one-pronged pick retains the shape of the deer's antler. Their light is a candle stuck in a cup of chalk. And the ladder is just a series of ledges or, as they call them, "toes" in the wall, five feet apart and connected by foot-holes. The miner simply jerks his load, several hundredweight of flints, from ledge to ledge by the aid of his head, which he protects with something that neolithic man was probably without, namely, an old bowler hat. He even talks a language of his own. "Bubber-hutching on the sosh" is the term for sinking a pit on the slant, and, for all we can tell, may have a very ancient pedigree. And what becomes of the miner's output? It is sold by the "jag"—a jag being a pile just so high that when you stand on any side you can see the bottom flint on the other -to the knappers of Brandon. Any one of these-for instance, my friend Mr. Fred Snare -will, while you wait, break up a lump with a short round hammer into manageable pieces. Then, placing a "quarter" with his left hand on the leather pad that covers his knee, he will. with an oblong hammer, strike off flake after

flake, perhaps 1,500 in a morning; and finally will work these up into sharp-edged squares to serve as gun-flints for the trade with native Africa. Alas! the palmy days of knapping gunflints for the British Army will never return to Brandon. Still, there must have been trade depression in those parts at any time from the bronze-age up to the times of Brown Bess: for the strike-a-lights, still to be got at a penny each, can have barely kept the wolf from the door. And Mr. Snare is not merely an artisan but an artist. He has chipped out a flint ring, a feat which taxed the powers of the clever neolithic knappers of pre-dynastic Egypt; whilst with one of his own flint fishhooks he has taken a fine trout from the Little Ouse that runs by the town.

Thus there are things in old England that are older even than some of our friends wot. In that one county of Suffolk, for instance, the good flint—so rich in colour as it is, and so responsive to the hammer, at any rate if you get down to the lower layers or "sases," for instance, the floorstone, or the black smoothstone that is generally below water-level—has served the needs of all the palæolithic periods, and of the neolithic age as well, and likewise of the modern Englishmen who fought with flintlocks at Waterloo, or still more recently took out tinder-boxes with them to the war

in South Africa. And what does this stand for in terms of the antiquity of man? Thousands of years? We do not know exactly; but say rather hundreds of thousands of years.

## CHAPTER III

## RACE

THERE is a story about the British sailor who was asked to state what he understood by a Dago. "Dagoes," he replied, "is anything wot isn't our sort of chaps." In exactly the same way would an ancient Greek have explained what he meant by a "barbarian." When it takes this wholesale form we speak, not without reason, of race-prejudice. We may well wonder in the meantime how far this prejudice answers to something real. Race would certainly seem to be a fact that stares one in the face.

Stroll down any London street: you cannot go wrong about that Hindu student with features rather like ours but of a darker shade. The short dapper man with eyes a little aslant is no less unmistakably a Japanese. It takes but a slightly more practised eye to pick out the German waiter, the French chauffeur, and the Italian vendor of ices. Lastly, when you have made yourself really good at the game, you will be scarcely more likely to confuse a small dark Welshman with a broad florid Yorkshireman than a retriever with a mastiff.

Yes, but remember that you are judging by the gross impression, not by the element of race or breed as distinguished from the rest. Here, you say, come a couple of our American cousins. Perhaps it is their speech that bewrayeth them; or perhaps it is the general cut of their jih. If you were to go into their actual pedigrees, you would find that the one had a Scotch father and a mother from out of Dorset; whilst the other was partly Scandinavian and partly Spanish with a tincture of Jew. Yet to all intents and purposes they form one type. And, the more deeply you go into it, the more mixed we all of us turn out to be, when breed, and breed alone, is the subject of inquiry. Yet race, in the only sense that the word has for an anthropologist, means inherited breed, and nothing more or less-inherited breed, and all that it covers. whether bodily or mental features.

For race, let it not be forgotten, presumably extends to mind as well as to body. It is not merely skin-deep. Contrast the stoical Red Indian with the vivacious Negro; or the phleg-

matic Dutchman with the passionate Italian. True, you say, but what about the influence of their various climates, or again of their different ideals of behaviour? Quite so. It is immensely difficult to separate the effects of the various factors. Yet surely the racefactor counts for something in the mental constitution. Any breeder of horses will tell you that neither the climate of Newmarket, nor careful training, nor any quantity of oats, nor anything else, will put racing mettle into cart-horse stock.

In what follows, then, I shall try to show just what the problem about the race-factor is, even if I have to trespass a little way into general biology in order to do so. And I shall not attempt to conceal the difficulties relating to the race-problem. I know that the ordinary reader is supposed to prefer that all the thinking should be done beforehand, and merely the results submitted to him. But I cannot believe that he would find it edifying to look at half-a-dozen books upon the races of mankind, and find half-a-dozen accounts of their relationships, having scarcely a single statement in common. Far better face the fact that race still baffles us almost completely.

<sup>&</sup>lt;sup>1</sup> The reader is advised to consultalso the more comprehensive study on *Evolution* by Professors Geddes and Thomson in this series.

Yet, breed is there; and, in its own time and in its own way, breed will out.

Race or breed was a moment ago described as a factor in human nature. But to break up human nature into factors is something that we can do, or try to do, in thought only. In practice we can never succeed in doing anything of the kind. A machine such as a watch we can take to bits and then put together again. Even a chemical compound such as water we can resolve into oxygen and hydrogen and then reproduce out of its elements. But to dissect a living thing is to kill it once and for all. Life, as was said in the first chapter, is something unique, with the unique property of being able to evolve. As life evolves, that is to say changes, by being handed on from certain forms to certain other forms, a partial rigidity marks the process together with a partial plasticity. There is a stiffening, so to speak, that keeps the life-force up to a point true to its old direction; though, short of that limit, it is free to take a new line of its own. Race, then, stands for the stiffening in the evolutionary process. Just up to what point it goes in any given case we probably can never quite tell. Yet, if we could think our way anywhere near to that point in regard to man, I doubt not that we should eventually succeed in forging a fresh instrument for controlling the destinies of our species, an instrument perhaps more powerful than education itself—I mean, eugenics, the art of improving the human breed.

To see what race means when considered apart, let us first of all take your individual self, and ask how you would proceed to separate your inherited nature from the nature which you have acquired in the course of living your life. It is not easy. Suppose, however, that you had a twin brother born, if indeed that were possible, as like you as one pea is like another. An accident in childhood, however, has caused him to lose a leg. So he becomes a clerk, living a sedentary life in an office. You, on the other hand, with your two lusty legs to help you, become a postman, always on the run. Well, the two of you are now very different men in looks and habits. He is pale and you are brown. You play football and he sits at home reading. Nevertheless, any friend who knows you both intimately will discover fifty little things that bespeak in you the same underlying nature and bent. You are both, for instance, slightly colour-blind, and both inclined to fly into violent passions on occasion. That is your common inheritance peeping out-if, at least, your friend has really managed to make allowance for your common bringing-up, which might mainly

account for the passionateness, though hardly for the colour-blindness.

But now comes the great difficulty. Let us further suppose that you two twins marry wives who are also twins born as like as two peas; and each pair of you has a family. Which of the two batches of children will tend on the whole to have the stronger legs? Your legs are strong by use; your brother's are weak by disuse. But do use and disuse make any difference to the race? That is the theoretical question which, above all others, complicates and hampers our present-day attempts to understand heredity.

In technical language, this is the problem of use-inheritance, otherwise known as the inheritance of acquired characters. It is apt to seem obvious to the plain man that the effects of use and disuse are transmitted to offspring. So, too, thought Lamarck, who half a century before Darwin propounded a theory of the origin of species that was equally evolutionary in its way. Why does the giraffe have so long a neck? La tarck thought it was because the giraffe had acquired a habit of stretching his neck out. Every time there was a bad season, the giraffes must all stretch up as high as ever they could towards the leafy tops of the trees; and the one that stretched up farthest survived, and

65

handed on the capacity for a like feat to his fortunate descendants. Now Darwin himself was ready to allow that use and disuse might have some influence on the offspring's inheritance: but he thought that this influence was small as compared with the influence of what, for want of a better term, he called spontaneous variation. Certain of his followers, however. who call themselves Neo-Darwinians, are ready to go one better. Led by the German biologist, Weismann, they would thrust the Lamarckians, with their hypothesis of use-inheritance, clean out of the field. Spontaneous variation, they assert, is all that is needed to prepare the way for the selection of the tall giraffe. It happened to be born that way. In other words, its parents had it in them to breed it so. This is not a theory that tells one anything positive. It is merely a caution to look away from use and disuse to another explanation of variation that is not yet forthcoming.

After all, the plain man must remember that the effects of use and disuse, which he seems to see everywhere about him, are mixed up with plenty of apparent instances to the contrary. He will smile, perhaps, when I tell him that Weismann cut off the tails of endless mice, and, breeding them together, found that tails invariably decorated the race as before.

I remember hearing Mr. Bernard Shaw comment on this experiment. He was defending the Lamarckianism of Samuel Butler, who declared that our heredity was a kind of racememory, a lapsed intelligence. "Why," said Mr. Shaw, "did the mice continue to grow Because they never wanted to have them cut off." But men-folk are wont to shave off their beards because they want to have them off; and, amongst people more conservative in their habits than ourselves. such a custom may persist through numberless generations. Yet who ever observed the slightest signs of beardlessness being produced in this way? On the other hand, there are beardless as well as bearded races in the world; and, by crossing them, you could, doubtless, soon produce ups and downs in the razor-trade. Only, as Weismann's school would say, the required variation is in this case spontaneous. that is, comes entirely of its own accord.

Leaving the question of use-inheritance open, I pass on to say a word about variation as considered in itself and apart from this doubtful influence. Weismann holds that organisms resulting from the union of two cells are more variable than those produced out of a single one. On this view, variation depends largely on the laws of the interaction of the dissimilar characters brought

together in cell-union. But what are these laws? The best that can be said is that we are getting to know a little more about them every day. Amongst other lines of inquiry, the so-called Mendelian experiments promise to clear up much that is at present dark.

The development of the individual that results from such cell-union is no mere mixture or addition, but a process of selective organization. To put it very absurdly, one does not find a pair of two-legged parents having a child with legs as big as the two sets of legs together, or with four legs, two of them of one shape and two of another. In other words, of the possibilities contributed by the father and mother, some are taken and some are left in the case of any one child. Further, different children will represent different selections from amongst the germinal elements. Mendelism, by the way, is especially concerned to find out the law according to which the different types of organization are distributed between the offspring. Each child, meanwhile, is a unique individual, a living whole with an organization of its very own. means that its constituent elements form a system. They stand to each other in relations of mutual support. In short, life is possible because there is balance.

This general state of balance, however, is able to go along with a lot of special balancings that seem largely independent of each other. It is important to remember this when we come a little later on to consider the instincts. All sorts of lesser systems prevail within the larger system represented by the individual organism. It is just as if within the state with its central government there were a number of county councils, municipal corporations, and so on, each of them enjoying a certain measure of self-government on its own account. Thus we can see in a very general way how it is that so much variation is possible. The selective organization, which from amongst the germinal elements precipitates ever so many and different forms of fresh life, is so loose and elastic that a working arrangement between the parts can be reached in all sorts of directions. The lesser systems are so far self-governing that they can be trusted to get along in almost any combination; though of course some combinations are naturally stronger and more stable than the rest, and hence tend to outlast them, or, as the phrase goes, to be preserved by natural selection.

It is time to take account of the principle of natural selection. We have done with the subject of variation. Whether use and disuse

69

have helped to shape the fresh forms of life, or whether these are purely spontaneous combinations that have come into being on what we are pleased to call their own account, at any rate let us take them as given. What happens now? At this point begins the work of natural selection. Darwin's great achievement was to formulate this law; though it is only fair to add that it was discovered by A. R. Wallace at the same moment. Both of them got the first hint of it from Malthus. This English clergyman, writing about half a century earlier, had shown that the growth of population is apt very considerably to outstrip the development of food-supply; whereupon natural checks such as famine or war must, he argued, ruthlessly intervene so as to redress the balance. Applying these considerations to the plant and animal kingdoms at large, Darwin and Wallace perceived that, of the multitudinous forms of life thrust out upon the world to get a livelihood as best they could, a vast quantity must be weeded out. Moreover, since they vary exceedingly in their type of organization, it seemed reasonable to suppose that, of the competitors, those who were innately fitted to make the best of the ever-changing circumstances would outlive the rest. An appeal to the facts fully bore out this hypothesis. It must not, indeed, be

thought that all the weeding out which goes on favours the fittest. Accidents will always happen. On the whole, however, the type that is most at home under the surrounding conditions, it may be because it is more complex, or it may be because it is of simpler organization, survives the rest.

Now to survive is to survive to breed. you live to eighty, and have no children, vou do not survive in the biological sense; whereas your neighbour who died at forty may survive in a numerous progeny. Natural selection is always in the last resort between individuals: because individuals are alone competent to breed. At the same time, the reason for the individual's survival may lie very largely outside him. Amongst the bees, for instance, a non-working type of insect survives to breed because the sterile workers do their duty by the hive. So, too, that other social animal, man, carries on the race by means of some whom others die childless in order to preserve. Nevertheless, breeding being a strictly individual and personal affair, there is always a risk lest a society, through spending its best too freely, end by recruiting its numbers from those in whom the engrained capacity to render social service is weakly developed. To rear a goodly family must always be the first duty of unselfish people; for otherwise the

spirit of unselfishness can hardly be kept alive in the world.

Enough about heredity as a condition of evolution. We return, with a better chance of distinguishing them, to the consideration of the special effects that it brings about. It was said just now that heredity is the stiffening in human nature, a stiffening bound up with a more or less considerable offset of plasticity. Now clearly it is in some sense true that the child's whole nature, its modicum of plasticity included, is handed on from its parents. business in this chapter, however, is on the whole to put out of our thoughts this plastic side of the inherited life-force. The more or less rigid, definite, systematized charactersthese form the hereditary factor, the race. Now none of these are ever quite fixed. A certain measure of plasticity has to be counted in as part of their very nature. Even in the bee, with its highly definite instincts, there is a certain flexibility bound up with each of these: so that, for instance, the inborn faculty of building up the comb regularly is modified if the hive happens to be of an awkward shape. Yet, as compared with what remains over, the characters that we are able to distinguish as racial must show fixity. Unfortunately, habits show fixity too. Yet habits belong to the plastic side of our nature; for, in forming a habit, we are plastic at the start, though hardly so once we have let ourselves go. Habits, then, must be discounted in our search for the hereditary bias in our lives. It is no use trying to disguise the difficulties attending an inquiry into race.

These difficulties notwithstanding, in the rest of this chapter let us consider a few of what are usually taken to be racial features of man. As before, the treatment must be illustrative; we cannot work through the list. Further, we must be content with a very rough division into bodily and mental features. Just at this point we shall find it very hard to say what is to be reckoned bodily and what mental. Leaving these niceties to the philosophers, however, let us go ahead as best we can.

Oh for an external race-mark about which there could be no mistake! That has always been a dream of the anthropologist; but it is a dream that shows no signs of coming true. All sorts of tests of this kind have been suggested. Cranium, cranial sutures, frontal process, nasal bones, eye, chin, jaws, wisdom teeth, hair, humerus, pelvis, the heart-line across the hand, calf, tibia, heel, colour, and even smell—all these external signs, as well as many more, have been thought, separately

RACE 73

or together, to afford the crucial test of a man's pedigree. Clearly I cannot here cross-examine the entire crowd of claimants, were I even competent to do so. I shall, therefore, say a few words about two, and two only, namely, head-form and colour.

I believe that, if the plain man were to ask himself how, in walking down a London street, he distinguished one racial type from another, he would find that he chiefly went by colour. In a general way he knows how to make allowance for sunburn and get down to the native complexion underneath. But, if he went off presently to a museum and tried to apply his test to the pre-historic men on view there, it would fail for the simple reason that long ago they left their skins behind them. He would have to get to work, therefore, on their bony parts, and doubtless would attack the skulls for choice. By considering headform and colour, then, we may help to cover a certain amount of the ground, vast as it is. For remember that anthropology in this department draws no line between ancient and modern, or between savage and civilized, but tries to tackle every sort of man that comes within its reach.

Head-shape is really a far more complicated thing to arrive at for purposes of comparison than one might suppose. Since no part of the skull maintains a stable position in regard to the rest, there can be no fixed standard of measurement, but at most a judgment of likeness or unlikeness founded on an averaging of the total proportions. Thus it comes about that, in the last resort, the impression of a good expert is worth in these matters a great deal more than rows of figures. Moreover, rows of figures in their turn take a lot of understanding. Besides, they are not always easy to get. This is especially the case if you are measuring a live subject. Perhaps he is armed with a club, and may take amiss the use of an instrument that has to be poked into his ears, or what not. So, for one reason or another, we have often to put up with that very unsatisfactory single-figure description of the head-form which is known as the cranial index. You take the greatest length and greatest breadth of the skull, and write down the result obtained by dividing the former into the latter when multiplied by 100. Medium-headed people have an index of anything between 75 and 80. Below that figure men rank as long-headed, above it as round-headed. This test, however, as I have hinted, will not by itself carry us far. On the other hand, I believe that a good judge of head-form in all its aspects taken together will generally be able to make a pretty shrewd guess as to the people amongst whom the owner of a given skull is to be placed.

Unfortunately, to say people is not to say race. It may be that a given people tend to have a characteristic head-form, not so much because they are of common breed, as because they are subjected after birth, or at any rate after conception, to one and the same environ-Thus some careful observations made recently by Professor Boas on American immigrants from various parts of Europe seem to show that the new environment does in some unexplained way modify the head-form to a remarkable extent. For example, amongst the East European Jews the head of the European-born is shorter and wider than that of the American-born, the difference being even more marked in the second generation of the American-born. At the same time. other European nationalities exhibit changes of other kinds, all these changes, however, being in the direction of a convergence towards one and the same American type. How are we to explain these facts, supposing them to be corroborated by more extensive studies? It would seem that we must at any rate allow for a considerable plasticity in the head-form, whereby it is capable of undergoing decisive alteration under the influences of environment; not, of course, at any moment during life, but during those early days when the growth of the head is especially rapid. The further question whether such an acquired character can be transmitted we need not raise again. Before passing on, however, let this one word to the wise be uttered. If the skull can be so affected, then what about the brain inside it? If the hereditarily long-headed can change under suitable conditions, then what about the hereditarily short-witted?

It remains to say a word about the types of pre-historic men as judged by their bony remains and especially by their skulls. Naturally the subject bristles with uncertainties.

By itself stands the so-called Pithecanthropus (Ape-man) of Java, a regular "missing link." The top of the skull, several teeth, and a thigh-bone, found at a certain distance from each other, are all that we have of it or him. Dr. Dubois, their discoverer, has made out a fairly strong case for supposing that the geological stratum in which the remains occurred is Pliocene—that is to say, belongs to the Tertiary epoch, to which man has not yet been traced back with any strong probability. It must remain, however, highly doubtful whether this is a proto-human being, or merely an ape of a type related to the gibbon. The intermediate character is shown especially in the head form. If an ape, Pithecanthropus

had an enormous brain; if a man, he must have verged on what we should consider idiocy.

Also standing somewhat by itself is the Heidelberg man. All that we have of him is a well-preserved lower jaw with its teeth. was found more than eighty feet below the surface of the soil, in company with animal remains that make it possible to fix its position in the scale of pre-historic periods with some accuracy. Judged by this test, it is as old as the oldest of the unmistakable drift implements, the so-called Chellean (from Chelles in the department of Seine-et-Marne in France). The jaw by itself would suggest a gorilla, being both chinless and immensely powerful. The teeth, however, are human beyond question, and can be matched, or perhaps even in respect to certain marks of primitiveness out-matched, amongst ancient skulls of the Neanderthal order, if not also amongst modern ones from Australia.

We may next consider the Neanderthal group of skulls, so named after the first of that type found in 1856 in the Neanderthal valley close to Düsseldorf in the Rhine basin. A narrow head, with low and retreating forehead, and a thick projecting brow-ridge, yet with at least twice the brain capacity of any gorilla, set the learned world disputing whether this

was an ape, a normal man, or an idiot. It was unfortunate that there were no proofs to hand of the age of these relics. After a while. however, similar specimens began to come in. Thus in 1866 the jaw of a woman, displaying a tendency to chinlessness combined with great strength, was found in the Cave of La Naulette in Belgium, associated with more or less dateable remains of the mammoth, woolly rhinoceros and reindeer. A few years earlier, though its importance was not appreciated at the moment, there had been discovered, near Forbes' quarry at Gibraltar, the famous Gibraltar skull, now to be seen in the Museum of the Royal College of Surgeons in London. Any visitor will notice at the first glance that this is no man of to-day. There are the narrow head, low crown, and prominent brow-ridge as before, supplemented by the most extraordinary eye-holes that were ever seen, vast circles widely separated from each other. And other peculiar features will reveal themselves on a close inspection: for instance, the horseshoe form in which, ape-fashion, the teeth are arranged, and the muzzle-like shape of the face due to the absence of the depressions that in our own case run down on each side from just outside the nostrils towards the corners of the mouth.

And now at the present time we have twenty

79

or more individuals of this Neanderthal type to compare. The latest discoveries are perhaps the most interesting, because in two and perhaps other cases the man has been properly buried. Thus at La Chapelle-aux-Saints, in the French department of Corrèze, a skeleton, which in its head-form closely recalls the Gibraltar example, was found in a pit dug in the floor of a low grotto. It lay on its back, head to the west, with one arm bent towards the head, the other outstretched, and the legs drawn up. Some bison bones lay in the grave as if a food-offering had been made. Hard by were flint implements of a well-marked Mousterian type. In the shelter of Le Moustier itself a similar burial was discovered. The body lay on its right side, with the right arm bent so as to support the head upon a carefully arranged pillow of flints; whilst the left arm was stretched out, so that the hand might be near a magnificent oval stone-weapon chipped on both faces, evidently laid there by design. So much for these men of the Neanderthal type, denizens of the mid-palæolithic world at the very latest. Ape-like they doubtless are in their head-form up to a certain point, though almost all their separate features occur here and there amongst modern Australian natives. And yet they were men enough, had brains enough, to believe in a life after death. There is something to think about in that.

Without going outside Europe, we have, however, to reckon with at least two other types of very early head-form.

In one of the caves of Mentone known as La Grotte des Enfants two skeletons from a low stratum were of a primitive type, but unlike the Neanderthal, and have been thought to show affinities to the modern negro. As, however, no other Proto-Negroes are indisputably forthcoming either from Europe or from any other part of the world, there is little at present to be made out about this interesting racial type.

In the layer immediately above the negroid remains, however, as well as in other caves at Mentone, were the bones of individuals of quite another order, one being positively a giant. They are known as the Cro-Magnon race, after a group of them discovered in a rock shelter of that name on the banks of the Vezère. These particular people can be shown to be Aurignacian—that is to say, to have lived just after the Mousterian men of the Neanderthal head-form. If, however, as has been already suggested, the Galley Hill individual, who shows affinities to the Cro-Magnon type, really goes back to the drift-period, then we can believe that from very

RACE 81

early times there co-existed in Europe at least two varieties: and these so distinct, that some authorities would trace the original divergence between them right back to the times before man and the apes had parted company, linking the Neanderthal race with the gorilla and the Cro-Magnon race with the orang. The Cro-Magnon head-form is refined and highly developed. The forehead is high, and the chin shapely, whilst neither the brow-ridge nor the lower jaw protrudes as in the Neanderthal type. Whether this race survives in modern Europe is, as was said in the last chapter, highly uncertain. In certain respects —for instance, in a certain shortness of face these people present exceptional features; though some think they can still find men of this type in the Dordogne district. Perhaps the chances are, however, considering how skulls of the neolithic period prove to be anything but uniform, and suggest crossings between different stocks, that we may claim kinship to some extent with the more goodlooking of the two main types of palæolithic man—always supposing that head-form can be taken as a guide. But can it? The Pygmies of the Congo region have medium heads; the Bushmen of South Africa, usually regarded as akin in race, have long heads. The American Indians, generally supposed to

be all, or nearly all, of one racial type, show considerable differences of head-form; and so on. It need not be repeated that any racemark is liable to deceive.

We have sufficiently considered the use to which the particular race-mark of head-form has been put in the attempted classification of the very early men who have left their bones behind them. Let us now turn to another race-mark, namely colour; because, though it may really be less satisfactory than others, for instance hair, that is the one to which ordinary people naturally turn when they seek to classify by races the present inhabitants of the earth.

When Linnseus in pre-Darwinian days distinguished four varieties of man, the white European, the red American, the yellow Asiatic, and the black African, he did not dream of providing the basis of anything more than an artificial classification. He probably would have agreed with Buffon in saying that in every case it was one and the same kind of man, only dyed differently by the different climates. But the Darwinian is searching for a natural classification. He wants to distinguish men according to their actual descent. Now race and descent mean for him the same thing. Hence a race-mark, if one is to be

RACE 88

found, must stand for, by co-existing with, the whole mass of properties that form the inheritance. Can colour serve for a race-mark in this profound sense? That is the only question here.

First of all, what is the use of being coloured one way or the other? Does it make any difference? Is it something, like the heart-line of the hand, that may go along with useful qualities, but in itself seems to be a meaningless accident? Well, as some unfortunate people will be able to tell you, colour is still a formidable handicap in the struggle for existence. Not to consider the colour-prejudice in other aspects, there is no gainsaying the part it plays in sexual selection at this hour. The lower animals appear to be guided in the choice of a mate by externals of a striking and obvious sort. And men and women to this day marry more with their eves than with their heads.

The coloration of man, however, though it may have come to subserve the purposes of mating, does not seem in its origin to have been like the bright coloration of the male bird. It was not something wholly useless save as a means of sexual attraction, though in such a capacity useful because a mark of vital vigour. Colour almost certainly developed in strict relation to climate. Right away in the back

ages we must place what Bagehot has called the race-making epoch, when the chief bodily differences, including differences of colour, arose amongst men. In those days, we may suppose, natural selection acted largely on the body, because mind had not yet become the prime condition of survival. The rest is a question of prehistoric geography. Within the tropics, the habitat of the man-like apes, and presumably of the earliest men, a black skin protects against sunlight. A white skin, on the other hand—though this is more doubtful-perhaps economizes sun-heat in colder latitudes. Brown, yellow and the socalled red are intermediate tints suitable to intermediate regions. It is not hard to plot out in the pre-historic map of the world geo-graphical provinces, or "areas of characteriza-tion," where races of different shades corresponding to differences in the climate might develop, in an isolation more or less complete, such as must tend to reinforce the process of differentiation.

Let it not be forgotten, however, that individual plasticity plays its part too in the determination of human colour. The Anglo-Indian planter is apt to return from a long sojourn in the East with his skin charged with a dark pigment which no application of soap will remove during the rest of his life. It would be

interesting to conduct experiments, on the lines of those of Professor Boas already mentioned, with the object of discovering in what degree the same capacity for amassing protective pigment declares itself in children of European parentage born in the tropics or transplanted thither during infancy. Correspondingly, the tendency of dark stocks to bleach in cold countries needs to be studied. In the background, too, lurks the question whether such effects of individual plasticity can be transmitted to offspring, and become part of the inheritance.

One more remark upon the subject of colour. Now-a-days civilized peoples, as well as many of the ruder races that the former govern, wear In other words they have dodged the sun, by developing, with the aid of mind, a complex society that includes the makers of white drill suits and solar helmets. But. under such conditions, the colour of one's skin becomes more or less of a luxury. Protective pigment, at any rate now-a-days, counts for little as compared with capacity for social service. Colour, in short, is rapidly losing its vital function. Will it therefore tend to disappear? In the long run, it would seem -perhaps only in the very long run-it will become dissociated from that general fitness to survive under particular climatic conditions

of which it was once the innate mark. Be this as it may, race-prejudice, that is so largely founded on sheer considerations of colour, is bound to decay, if and when the races of darker colour succeed in displaying, on the average, such qualities of mind as will enable them to compete with the whites on equal terms, in a world which is coming more and more to include all climates.

Thus we are led on to discuss race in its mental aspect. Here, more than ever, we are all at sea, for want of a proper criterion. What is to be the test of mind? Indeed mind and plasticity are almost the same thing. Race, therefore, as being the stiffening in the evolution of life, might seem by its very nature opposed to mind as a limiting or obstructing force. Are we, then, going to return to the old pre-scientific notion of soul as something alien to body, and thereby simply clogged, thwarted and dragged down? That would never do. Body and soul are, for the working purposes of science, to be conceived as in perfect accord, as co-helpers in the work of life, and as such subject to a common development. Heredity, then, must be assumed to apply to both equally. In proportion as there is plastic mind there will be plastic body.

Unfortunately, the most plastic part of body

RACE 87

is likewise the hardest to observe, at any rate whilst it is alive, namely, the brain. No certain criterion of heredity, then, is likely to be available from this quarter. You will see it stated, for instance, that the size of the brain cavity will serve to mark off one race from another. This is extremely doubtful, to put it mildly. No doubt the average European shows some advantage in this respect as compared, say, with the Bushman. But then you have to write off so much for their respective types of body, a bigger body going in general with a bigger head, that in the end you find yourself comparing mere abstractions. Again. the European may be the first to cry off on the ground that comparisons are odious; for some specimens of Neanderthal man in sheer size of the brain cavity are said to give points to any of our modern poets and politicians. Clearly, then, something is wrong with this test. Nor, if the brain itself be examined after death, and the form and number of its convolutions compared, is this criterion of heredi tary brain-power any more satisfactory. It might be possible in this way to detect the difference between an idiot and a person of normal intelligence, but not the difference between a fool and a genius.

We cross the uncertain line that divides the bodily from the mental when we subject the

same problem of hereditary mental endowment to the methods of what is known as experimental psychology. Thus acuteness of sight, hearing, taste, smell and feeling are measured by various ingenious devices. Seeing what stories travellers bring back with them about the hawk-like vision of hunting races, one might suppose that such comparisons would be all in their favour Cambridge Expedition to Torres Straits, however, of which Dr. Haddon was the leader, included several well-trained psychologists, who devoted special attention to this subject; and their results show that the sensory powers of these rude folk were on the average much the same as those of Europeans. It is the hunter's experience only that enables him to sight the game at an immense distance. There are a great many more complicated tests of the same type designed to estimate the force of memory, attention, association, reasoning and other faculties that most people would regard as purely mental; whilst another set of such tests deals with reaction to stimulus. co-ordination between hand and eye. fatigue, tremor, and, most ingenious perhaps of all, emotional excitement as shown through the respiration—phenomena which are, as it were, mental and bodily at once and together. Unfortunately, psychology cannot distinguish

in such cases between the effects of heredity and those of individual experience, whether it take the form of high culture or of a dissipated life. Indeed, the purely temporary condition of body and mind is apt to influence the results. A man has been up late, let us say, or has been for a long walk, or has missed a meal; obviously his reaction-times, his record for memory, and so on, will show a difference for the worse. Or, again, the subject may confront the experiment in very various moods. At one moment he may be full of vanity, anxious to show what superior qualities he possesses; whilst at another time he will be bored. Not to labour the point further, these methods, whatever they may become in the future, are at present unable to afford any criterion whatever of the mental ability that goes with race. They are fertile in statistics; but an interpretation of these statistics that furthers our purpose is still to seek.

But surely, it will be said, we can tell an instinct when we come across it, so uniform as it is, and so independent of the rest of the system. Not at all. For one thing, the idea that an instinct is a piece of mechanism, as fixed as fate, is quite out of fashion. It is now known to be highly plastic in many cases, to vary considerably in individuals, and to

involve conscious processes, thought, feeling and will, at any rate of an elementary kind? Again, how are you going to isolate an instinct? Those few automatic responses to stimulation that appear shortly after birth, as, for instance, sucking, may perhaps be recognized, since parental training and experience in general are out of the question here. But what about the instinct or group of instincts answering to sex? This is latent until a stage of life when experience is already in full swing. Indeed, psychologists are still busy discussing whether man has very few instincts or whether, on the contrary, he appears to have few because he really has so many that, in practice, they keep interfering with one another all the time. In support of the latter view, it has been recently suggested by Mr. McDougall that the best test of the instincts that we have is to be found in the specific emotions. He believes that every instinctive process consists of an afferent part or message, a central part, and an efferent part or discharge. At its two ends the process is highly plastic. Message and discharge, to which thought and will correspond, are modified in their type as experience matures. The central part, on the other hand, to which emotion answers on the side of consciousness. remains for ever much the same. To fear. to

wonder, to be angry, or disgusted, to be puffed up, or cast down, or to be affected with tenderness—all these feelings, argues Mr. McDougall, and various more complicated emotions arising out of their combinations with each other, are common to all men, and bespeak in them deepseated tendencies to react on stimulation in relatively particular and definite ways. And there is much, I think, to be said in favour of this contention.

Yet, granting this, do we thus reach a criterion whereby the different races of men are to be distinguished? Far from it. Nay, on the contrary, as judged simply by his emotions, man is very much alike everywhere, from China to Peru. They are all there in germ, though different customs and grades of culture tend to bring special types of feeling to the fore.

Indeed, a certain paradox is to be noted here. The Negro, one would naturally say, is in general more emotional than the white man. Yet some experiments conducted by Miss Kellor of Chicago on negresses and white women, by means of the test of the effects of emotion on respiration, brought out the former as decidedly the more stolid of the two. And, whatever be thought of the value of such methods of proof, certain it is that the observers of rude races incline to put down

most of them as apathetic, when not tuned up to concert-pitch by a dance or other social event. It may well be, then, that it is not the hereditary temperament of the Negro, so much as the habit, which he shares with other peoples at the same level of culture, of living and acting in a crowd, that accounts for his apparent excitability. But after all, "mafficking" is not unknown in civilized countries. Thus the quest for a race-mark of a mental kind is barren once more.

What, then, you exclaim, is the outcome of this chapter of negatives? Is it driving at the universal equality and brotherhood of man? Or, on the contrary, does it hint at the need of a stern system of eugenics? I offer nothing in the way of a practical suggestion. I am merely trying to show that, considered anthropologically—that is to say, in terms of pure theory—race or breed remains something which we cannot at present isolate, though we believe it to be there. Practice, meanwhile, must wait on theory; mere prejudices, bad as they are, are hardly worse guides to action than premature exploitations of science.

As regards the universal brotherhood of man, the most that can be said is this: The old ideas about race as something hard and fast for all time are distinctly on the decline. Plasticity, or, in other words, the power of adaptation to environment, has to be admitted to a greater share in the moulding of mind, and even of body, than ever before. But how plasticity is related to race we do not yet know. It may be that use-inheritance somehow incorporates its effects in the offspring of the plastic parents. Or it may be simply that plasticity increases with inter-breeding on a wider basis. These problems have still to be solved.

As regards eugenics, there is no doubt that a vast and persistent elimination of lives goes on even in civilized countries. It has been calculated that, of every hundred English born alive, fifty do not survive to breed, and, of the remainder, half produce three-quarters of the next generation. But is the elimination selective? We can hardly doubt that it is to some extent. But what its results arewhether it mainly favours immunity from certain diseases, or the capacity for a sedentary life in a town atmosphere, or intelligence and capacity for social service—is largely matter of guesswork. How, then, can we say what is the type to breed from, even if we confine our attention to one country? If, on the other hand, we look farther afield, and study the results of race-mixture or "miscegenation," we but encounter fresh puzzles. That the halfbreed is an unsatisfactory person may be true; and yet, until the conditions of his upbringing are somehow discounted, the race problem remains exactly where it was. Or, again, it may be true that miscegenation increases human fertility, as some hold; but, until it is shown that the increase of fertility does not merely result in flooding the world with inferior types, we are no nearer to a solution.

If, then, there is a practical moral to this chapter, it is merely this: to encourage anthropologists to press forward with their study of race; and in the meantime to do nothing rash.

## CHAPTER IV

## ENVIRONMENT

When a child is born it has been subjected for some three-quarters of a year already to the influences of environment. Its race, indeed, was fixed once for all at the moment of conception. Yet that superadded measure of plasticity, which has to be treated as something apart from the racial factor, enables it to respond for good or for evil to the prenatal—that is to say, maternal—environment. Thus we may easily fall into the mistake of

supposing our race to be degenerate, when poor feeding and exposure to unhealthy surroundings on the part of the mothers are really responsible for the crop of weaklings that we deplore. And, in so far as it turns out to be so, social reformers ought to heave a sigh of relief. Why? Because to improve the race by way of eugenics, though doubtless feasible within limits, remains an unrealized possibility through our want of knowledge. On the other hand, to improve the physical environment is fairly straight-ahead work, once we can awake the public conscience to the need of undertaking this task for the benefit of all classes of the community alike. If civilized man wishes to boast of being clearly superior to the rest of his kind, it must be mainly in respect to his control over the physical environment. Whatever may have been the case in the past, it seems as true now-a-days to say that man makes his physical environment as that his physical environment makes him.

Even if this be granted, however, it remains the fact that our material circumstances in the widest sense of the term play a very decisive part in the shaping of our lives. Hence the importance of geographical studies as they bear on the subject of man. From the moment that a child is conceived, it is sub-

jected to what it is now the fashion to call a "geographic control." Take the case of the child of English parents born in India. Clearly several factors will conspire to determine whether it lives or dies. For simplicity's sake let us treat them as three. First of all, there is the fact that the child belongs to a particular cultural group; in other words, that it has been born with a piece of paper in its mouth representing one share in the British Empire. Secondly, there is its race, involving, let us say, blue eyes and light hair, and a corresponding constitution. Thirdly, there is the climate and all that goes with it. Though in the first of these respects the white child is likely to be superior to the native, inasmuch as it will be tended with more careful regard to the laws of health: yet such disharmony prevails between the other two factors of race and climate, that it will almost certainly die, if it is not removed at a certain age from the country. Possibly the English could acclimatize themselves in India at the price of an immense toll of infant lives; but it is a price which they show no signs of being willing to pay.

What, then, are the limits of the geographic control? Where does its influence begin and end? Situation, race, and culture—to reduce it to a problem of three terms only—which

of the three, if any, in the long run controls the rest? Remember that the anthropologist is trying to be the historian of long perspective. History which counts by years, proto-history which counts by centuries, pre-history which counts by millenniums—he seeks to embrace them all. He sees the English in India, on the one hand, and in Australia on the other Will the one invasion prove an incident, he asks, and the other an event, as judged by a history of long perspective? Or, again, there are whites and blacks and redskins in the southern portion of the United States of America, having at present little in common save a common climate. Different races, different cultures, a common geographical situation -what net result will these vield for the historian of patient, far-seeing anthropological outlook? Clearly there is here something worth the puzzling out. But we cannot expect to puzzle it out all at once.

In these days geography, in the form known as anthropo-geography, is putting forth claims to be the leading branch of anthropology. And, doubtless, a thorough grounding in geography must henceforth be part of the anthropologist's equipment.<sup>1</sup> The schools of Ratzel

<sup>&</sup>lt;sup>1</sup> Thus the reader of the present work should not fail to study also Dr. Marion Newbigin's Geography in this series.

in Germany and Le Play in France are, however, fertile in generalizations that are far too pretty to be true. Like other specialists, they exaggerate the importance of their particular brand of work. The full meaning of life can never be expressed in terms of its material conditions. I confess that I am not deeply moved when Ratzel announces that man is a piece of the earth. Or when his admirers, anxious to improve on this, after distinguishing the atmosphere or air, the hydrosphere or water, the lithosphere or crust, and the centrosphere or interior mass, proceed to add that man is the most active portion of an intermittent biosphere, or living envelope of our planet, I cannot feel that the last word has been said about him.

Or, again, listen for a moment to M. Demolins, author of a very suggestive book, Comment la route crée le type social ("How the road creates the social type"). "There exists," he says in his preface, "on the surface of the terrestrial globe an infinite variety of peoples. What is the cause that has created this variety? In general the reply is, Race. But race explains nothing; for it remains to discover what has produced the diversity of races. Race is not a cause; it is a consequence. The first and decisive cause of the diversity of peoples and of the diversity of

races is the road that the peoples have followed. It is the road that creates the race, and that creates the social type." And he goes further: "If the history of humanity were to recommence, and the surface of the globe had not been transformed, this history would repeat itself in its main lines. There might well be secondary differences, for example, in certain manifestations of public life, in political revolutions, to which we assign far too great an importance; but the same roads would reproduce the same social types, and would impose on them the same essential characters."

There is no contending with a pious opinion. especially when it takes the form of an unverifiable prophecy. Let the level-headed anthropologist beware, however, lest he put all his eggs into one basket. Let him seek to give each factor in the problem its due. Race must count for something, or why do not the other animals take a leaf out of our book and build up rival civilizations on suitable sites? Why do men herd cattle, instead of the cattle herding the men? We are rational beings, in other words, because we have it in us to be rational beings. Again, culture, with the intelligence and choice it involves, counts for something too. It is easy to argue that, since there were the Asiatic steppes with the wild horses ready to hand in them, man was

bound sooner or later to tame the horse and develop the characteristic culture of the nomad type. Yes, but why did man tame the horse later rather than sooner? And why did the American redskins never tame the bison, and adopt a pastoral life in their vast prairies? Or why do modern black folk and white folk alike in Africa fail to utilize the elephant? Is it because these things cannot be done, or because man has not found out how to do them?

When all allowances, however, are made for the exaggerations almost pardonable in a branch of science still engaged in pushing its way to the front, anthropo-geography remains a far-reaching method of historical study which the anthropologist has to learn how to use. To put it crudely, he must learn how to work all the time with a map of the earth at his elbow.

First of all, let him imagine his world of man stationary. Let him plot out in turn the distribution of heat, of moisture, of diseases, of vegetation, of food-animals, of the physical types of man, of density of population, of industries, of forms of government, of religions, of languages, and so on and so forth. How far do these different distributions bear each other out? He will find a number of things that go together in what

will strike him as a natural way. For instance, all along the equator, whether in Africa or South America or Borneo, he will find them knocking off work in the middle of the day in order to take a siesta. On the other hand, other things will not agree so well. Thus, though all will be dark-skinned, the South Americans will be coppery, the Africans black, and the men of Borneo yellow.

Led on by such discrepancies, perhaps, he will want next to set his world of man in movement. He will thereupon perceive a circulation, so to speak, amongst the various peoples, suggestive of interrelations of a new type. Now so long as he is dealing in descriptions of a detached kind, concerning not merely the physical environment, but likewise the social adjustments more immediately corresponding thereto, he will be working at the geographical level. Directly it comes, however, to a generalized description or historical explanation, as when he seeks to show that here rather than there a civilization is likely to arise, geographical considerations proper will not suffice. Distribution is merely one aspect of evolution. Yet that it is a very important aspect will now be shown by a hasty survey of the world according to geographical regions.

Let us begin with Europe, so as to proceed gradually from the more known to the less known. Lecky has spoken of "the European epoch of the human mind." What is the geographical and physical theatre of that epoch? We may distinguish—I borrow the suggestion from Professor Myres—three stages in its development. Firstly, there was the river-phase; next, the Mediterranean phase; lastly, the present-day Atlantic phase. Thus, to begin with, the valleys of the Nile and Euphrates were each the home of civilizations both magnificent and enduring. They did not spring up spontaneously, however. If the rivers helped man, man also helped the rivers by inventing systems of irrigation. Next, from Minoan days right on to the end of the Middle Ages, the Mediterranean basin was the focus of all the higher life in the world, if we put out of sight the civilizations of India and China, together with the lesser cultures of Peru and Mexico. I will consider this second phase especially, because it is particularly instructive from the geographical standpoint. Finally, since the time of the discovery of America, the sea-trade, first called into existence as a civilizing agent by Mediterranean conditions, has shifted its base to the Atlantic coast, and especially to that land of natural harbours, the British Isles. We must give

up thinking in terms of an Eastern and Western Hemisphere. The true distinction, as applicable to modern times, is between a landhemisphere, with the Atlantic coast of Europe as its centre, and a sea-hemisphere, roughly coinciding with the Pacific. The Pacific is truly an ocean; but the Atlantic is becoming more of a "herring-pond" every day.

Fixing our eyes, then, on the Mediterranean basin, with its Black Sea extension, it is easy to perceive that we have here a well-defined geographical province, capable of acting as an area of characterization as perhaps no other in the world, once its various peoples had the taste and ingenuity to intermingle freely by way of the sea. The first fact to note is the completeness of the ring-fence that shuts it in. From the Pyrenees right along to Ararat runs the great Alpine fold, like a ridge in a crumpled table-cloth; the Spanish Sierras and the Atlas continue the circle to the south-west; and the rest is desert. Next, the configuration of the coasts makes for intercourse by sea, especially on the northern side with its peninsulas and islands, the remains of a foundered and drowned mountain-country. This same configuration, considered in connection with the flora and fauna that are favoured by the climate, goes far to explain that discontinuity of the political life which encouraged independence whilst it prevented self-sufficiency. The forest-belt, owing to the dry summer, lay towards the snow-line, and below it a scrub-belt, yielding poor hunting, drove men to grow their corn and olives and vines in the least swampy of the lowlands, scattered like mere oases amongst the hills and promontories.

For a long time, then, man along the north coasts must have been oppressed rather than assisted by his environment. It made mass-movements impossible. Great waves of migration from the steppe-land to the northeast, or from the forest-land to the north-west. would thunder on the long mountain barrier, only to trickle across in rivulets and form little pools of humanity here and there. Petty feuds between plain, shore, and mountain, as in ancient Attica, would but accentuate the prevailing division. Contrariwise, on the southern side of the Mediterranean, where there was open, if largely desert, country, there would be room under primitive conditions for a homogeneous race to multiply. It is in North Africa that we must probably place the original hotbed of that Mediterranean race, slight and dark with oval heads and faces, who during the neolithic period colonized the opposite side of the Mediterranean, and threw out a wing along the warm Atlantic coast as far

north as Scotland, as well as eastwards to the Upper Danube; whilst by way of south and east they certainly overran Egypt, Arabia, and Somaliland, with probable ramifications still farther in both directions. At last, however, in the eastern Mediterranean was learnt the lesson of the profits attending the sea-going life, and there began the true Mediterranean phase, which is essentially an era of sea-borne commerce. Then was the chance for the northern shore with its peninsular configuration. Carthage on the south shore must be regarded as a bold experiment that did not answer. The moral, then, would seem to be that the Mediterranean basin proved an ideal nursery for seamen; but only as soon as men were brave and clever enough to take to the sea. The geographical factor is at least partly consequence as well as cause.

Now let us proceed farther north into what was for the earlier Mediterranean folk the breeding-ground of barbarous outlanders, forming the chief menace to their circuit of settled civic life. It is necessary to regard northern Europe and northern Asia as forming one geographic province. Asia Minor, together with the Euphrates valley and with Arabia in a lesser degree, belongs to the Mediterranean area. India and China, with the south-eastern

corner of Asia that lies between them, form another system that will be considered separately later on.

The Eurasian northland consists naturally, that is to say, where cultivation has not introduced changes, of four belts. First, to the southward, come the mountain ranges passing eastwards into high plateau. Then, north of this line, from the Lower Danube as far as China, stretches a belt of grassland or steppe-country at a lower level, a belt which during the milder periods of the ice-age and immediately after it must have reached as far as the Atlantic. Then we find, still farther to the north, a forest belt, well developed in the Siberia of to-day. Lastly, on the verge of the Arctic sea stretches the tundra, the frozen soil of which is fertile in little else than a crop of reindeer moss, whilst to the west. as, for instance, in our islands, moors and bogs represent this zone of barren lands in a milder form.

The mountain belt is throughout its entire length the home of round-headed peoples, the so-called Alpine race, which is generally supposed to have originally come from the high plateau country of Asia. These round-headed men in western Europe appear where-ever there are hills, throwing out offshoots by way of the highlands of central France into

Brittany, and also reaching the British Isles. Here they introduced the use of bronze (an invention possibly acquired by contact with Egyptians in the near East), though without leaving any marked traces of themselves amongst the permanent population. At the other end of Europe they affected Greece by way of a steady though limited infiltration; whilst in Asia Minor they issued forth from their hills as the formidable Hittites, the people, by the way, to whom the Jews are said to owe their characteristic, yet non-Semitic, noses. But are these round-heads all of one race? Professor Ridgeway has put forward a rather paradoxical theory to the effect that, just as the long-faced Boer horse soon evolved in the mountains of Basutoland into a round-headed pony, so it is in a few generations with human mountaineers, irrespective of their breed. This is almost certainly to overrate the effects of environment. At the same time, in the present state of our knowledge, it would be premature either to affirm or deny that in the very long run roundheadedness goes with a mountain life.

The grassland next claims our attention. Here is the paradise of the horse, and consequently of the horse-breaker. Hence, therefore, came the charging multitudes of Asiatic marauders who, after many repulses, broke

through the Mediterranean cordon, and established themselves as the modern Turks: whilst at the other end of their beat they poured into China, which no great wall could avail to save. and established the Manchu domination. Given the steppe-country and a horse-taming people, we might seek, with the anthropogeographers of the bolder sort, to deduce the whole way of life, the nomadism, the ample food, including the milk-diet infants need and find so hard to obtain farther south, the communal system, the patriarchal type of authority, the caravan-system that can set the whole horde moving along like a swarm of locusts, and so on. But, as has been already pointed out, the horse had to be tamed first. Palæolithic man in western Europe had horsemeat in abundance. At Solutré, a little north of Lyons, a heap of food-refuse 100 yards long and 10 feet high largely consists of the bones of horses, most of them young and tender This shows that the old hunters knew how to enjoy the passing hour in their improvident way, like the equally reckless Bushmen, who have left similar Golgothas behind them in South Africa. Yet apparently palæolithic man did not tame the horse. Environment, in fact, can only give the hint; and man may not be ready to take it.

The forest-land of the north affords fair

hunting in its way, but it is doubtful if it is fitted to rear a copious brood of men, at any rate so long as stone weapons are alone available wherewith to master the vegetation and effect clearings, whilst burning the brushwood down is precluded by the damp. Where the original home may have been of the so-called Nordic race, the large-limbed fair men of the Teutonic world, remains something of mystery; though it is now the fashion to place it in the north-east of Europe rather than in Asia, and to suppose it to have been more or less isolated from the rest of the world by formerly existing sheets of water. Whereever it was, there must have been grassland enough to permit of pastoral habits, modified, perhaps, by some hunting on the one hand, and by some primitive agriculture on the other. The Mediterranean men, coming from North Africa, an excellent country for the horse, may have vied with the Asiatics of the steppes in introducing a varied culture to the north. At any rate, when the Germans of Tacitus emerge into the light of history, they are not mere foresters, but rather woodlanders, men of the glades, with many sides to their life; including an acquaintance with the sea and its ways, surpassing by far that of those early beachcombers whose miserable kitchen-middens are to be found along the coast of Denmark.

Of the tundra it is enough to say that all depends on the reindeer. This animal is the be-all and end-all of Lapp existence. When Nansen, after crossing Greenland, sailed home with his two Lapps, he called their attention to the crowds of people assembled to welcome them at the harbour. "Ah," said the elder and more thoughtful of the pair, "if they were only reindeer!" When domesticated, the reindeer yields milk as well as food, though large numbers are needed to keep the community in comfort. Otherwise hunting and fishing must serve to eke out the larder. Miserable indeed are the tribes or rather remnants of tribes along the Siberian tundra who have no reindeer. On the other hand, if there are plenty of wild reindeer, as amongst the Korvaks and some of the Chukchis. hunting by itself suffices.

Let us now pass on from the Eurasian northland to what is, zoologically, almost its annexe, North America; its tundra, for example, where the Eskimo live, being strictly continuous with the Asiatic zone. Though having a very different fauna and flora, South America presumably forms part of the same geographical province so far as man is concerned, though there is evidence for thinking that he reached it very early. Until, however,

more data are available for the pre-history of the American Indian, the great moulding forces, geographical or other, must be merely guessed at. Much turns on the period assigned to the first appearance of man in this region; for that he is indigenous is highly improbable, if only because no anthropoid apes are found here. The racial type, which, with the exception of the Eskimo, and possibly of the salmon-fishing tribes along the north-west coast, is one for the whole continent, has a rather distant resemblance to that of the Asiatic Mongols. Nor is there any difficulty in finding the immigrants a means of transit from northern Asia. Even if it be held that the land-bridge by way of what are now the Aleutian Islands was closed at too early a date for man to profit by it, there is always the passage over the ice by way of Behring Straits; which, if it bore the mammoth, as is proved by its remains in Alaska, could certainly bear man.

Once man was across, what was the manner of his distribution? On this point geography can at present tell us little. M. Demolins, it is true, describes three routes, one along the Rockies, the next down the central zone of prairies, and the third and most easterly by way of the great lakes. But this is pure hypothesis. No facts are adduced. Indeed,

evidence bearing on distribution is very hard to obtain in this area, since the physical type is so uniform throughout. The best available criterion is the somewhat poor one of the distribution of the very various languages. Some curious lines of migration are indicated by the occurrence of the same type of language in widely separated regions, the most striking example being the appearance of one linguistic stock, the so-called Athapascan, away up in the north-west by the Alaska boundary; at one or two points in south-western Oregon and north-western California, where an absolute medley of languages prevails; and again in the southern highlands along the line of Colorado and Utah to the other side of the Mexican frontier. Does it follow from this distribution that the Apaches, at the southern end of the range, have come down from Alaska, by way of the Rockies and the Pacific slope, to their present habitat? It might be so in this particular case; but there are also those who think that the signs in general point to a northward dispersal of tribes, who before had been driven south by a period of glacia-tion. Thus the first thing to be settled is the antiquity of the American type of man.

A glance at South America must suffice. Geographically it consists of three regions. Westwards we have the Pacific line of bracing highlands, running down from Mexico as far as Chile, the home of two or more cultures of a rather high order. Then to the east there is the steaming equatorial forest, first covering a fan of rivers, then rising up into healthier hill-country, the whole in its wild state hampering to human enterprise. And below it occurs the grassland of the pampas, only needing the horse to bring out the powers of its native occupants.

Before leaving this subject of the domesticated horse, of which so much use has already been made in order to illustrate how geographic opportunity and human contrivance must help each other out, it is worth noticing how an invention can quickly revolutionize even that cultural life of the ruder races which is usually supposed to be quite hide-bound by immemorial custom. When the Europeans first broke in upon the redskins of North America, they found them a people of hunters and fishers, it is true, but with agriculture as a second string everywhere east of the Mississippi as well as to the south, and on the whole sedentary, with villages scattered far apart; so that in pre-Conquest days they would seem to have been enjoying a large measure of security and peace. The coming of the whites soon crowded them back upon themselves, disarranging the old boundaries. At the same time the horse and the gun were introduced. With extraordinary rapidity the Indian adapted himself to a new mode of existence, a grassland life, complicated by the fact that the relentless pressure of the invaders gave it a predatory turn which it might otherwise have lacked. Something very similar, though neither conditions nor consequences were quite the same, occurred in the pampas of South America, where horse-Indians like the Patagonians, who seem at first sight the indigenous outcrop of the very soil, are really the recent by-product of an intrusive culture.

And now let us hark back to southern Asia with its two reservoirs of life, India and China, and between them a jutting promontory pointing the way to the Indonesian archipelago, and thence onward farther still to the wide-flung Austral region with its myriad lands ranging in size from a continent to a coral-atoll. Here we have a nursery of seamen on a vaster scale than in the Mediterranean; for remember that from this point man spread, by way of the sea, from Easter Island in the Eastern Pacific right away to Madagascar, where we find Javanese immigrants, and negroes who are probably Papuan, whilst the language is of a Malayo-Polynesian type.

India and China each well-nigh deserve the status of geographical provinces on their own account. Each is an area of settlement: and. once there is settlement, there is a cultural influence which co-operates with the environment to weed out immigrant forms; as we see, for example, in Egypt, where a characteristic physical type, or rather pair of types, a coarser and a finer, has apparently persisted, despite the constant influx of other races, from the dawn of its long history. India, however, and China have both suffered so much invasion from the Eurasian northland, and at the same time are of such great extent and comprise such diverse physical conditions, that they have, in the course of the long years, sent forth very various broods of men to seek their fortunes in the south-east.

Nor must we ignore the possibility of an earlier movement in the opposite direction. In Indonesia, the home of the orang-utan and gibbon, not to speak of Pithecanthropus, many authorities would place the original home of the human race. It will be wise to touch lightly on matters involving considerations of palæo-geography, that most kaleidoscopic of studies. The submerged continents which it calls from the vasty deep have a habit of crumbling away again. Let us therefore refrain from providing man with land-bridges

(draw-bridges, they might almost be called), whether between the Indonesian islands; or between New Guinea, Australia and Tasmania; or between Indonesia and Africa by way of the Indian Ocean. Let the curious facts about the present distribution of the racial types speak for themselves, the difficulties about identifying a racial type being in the meantime ever borne in mind.

Most striking of all is the diffusion of the Negro stocks with black skin and woolly hair. Their range is certainly suggestive of a breeding-ground somewhere about Indonesia. To the extreme west are the negroes of Africa, to the extreme east the Papuasians (Papuans and Melanesians) extending from New Guinea through the oceanic islands as far as Fiji. A series of connecting links is afforded by the small negroes of the pygmy type, the so-called Negritos. It is not known how far they represent a distinct and perhaps earlier experiment in negro-making, though this is the prevailing view; or whether the negro type, with its tendency to infantile characters due to the early closing of the cranial sutures, is apt to throw off dwarfed forms in an occasional way. At any rate, in Africa there are several groups of pygmies in the Congo region, as well as the Bushmen and allied stocks in South Africa. Then the Andaman Islanders, the Semang of the Malay Peninsula, the Aket of eastern Sumatra, the now extinct Kalangs of Java, said to have been in some respects the most ape-like of human beings, the Aetas of the Philippines, and the dwarfs, with a surprisingly high culture, recently reported from Dutch New Guinea, are like so many scattered pieces of human wreckage. Finally, if we turn our gaze southward, we find that Negritos until the other day inhabited Tasmania; whilst in Australia a strain of Negrito, or Negro (Papuan), blood is likewise to be detected.

Are we here on the track of the original dispersal of man? It is impossible to say. It is not even certain, though highly probable, that man originated in one spot. If he did, he must have been hereditarily endowed, almost from the outset, with an adaptability to different climates quite unique in its way. The tiger is able to range from the hot Indian jungle to the freezing Siberian tundra; but man is the cosmopolitan animal beyond all others. Somehow, on this theory of a single origin, he made his way to every quarter of the globe; and when he got there, though needing time, perhaps, to acquire the local colour, managed in the end to be at home. It looks as if both race and a dash of culture had a good deal to do with his exploitation of

geographical opportunity. How did the Australians and their Negrito forerunners invade their Austral world, at some period which, we cannot but suspect, was immensely remote in time? Certain at least it is that they crossed a formidable barrier. What is known as Wallace's line corresponds with the deep channel running between the islands of Bali and Lombok and continuing northwards to the west of Celebes. On the eastern side the fauna are non-Asiatic. Yet somehow into Australia with its queer monotremes and marsupials entered triumphant man-man and the dog with him. Haeckel has suggested that man followed the dog, playing as it were the jackal to him. But this sounds rather absurd. It looks as if man had already acquired enough seamanship to ferry himself across the zoological divide, and to take his faithful dog with him on board his raft or dug-out. Until we have facts whereon to build, however, it would be as unpardonable to lay down the law on these matters as it is permissible to fill up the blank by guesswork.

It remains to round off our original survey by a word or two more about the farther extremities, west, south, and east, of this vast southern world, to which south-eastern Asia furnishes a natural approach. The negroes did not have Africa, that is, Africa south of the Sahara, all to themselves. In and near the equatorial forest-region of the west the pure type prevails, displaying agricultural pursuits such as the cultivation of the banana, and, farther north, of millet, that must have been acquired before the race was driven out of the more open country. Elsewhere occur mixtures of every kind with intrusive pastoral peoples of the Mediterranean type, the negro blood, however, tending to predominate; and thus we get the Fulahs and similar stocks to the west along the grassland bordering on the desert; the Nilotic folk amongst the swamps of the Upper Nile; and throughout the eastern and southern parkland the vigorous Bantu peoples, who have swept the Bushmen and the kindred Hottentots before them down into the desert country in the extreme south-west. It may be added that Africa has a rich fauna and flora, much mineral wealth, and a physical configuration that, in respect to its interior, though not to its coasts, is highly diversified; so that it may be doubted whether the natives have reached as high a pitch of indigenous culture as the resources of the environment, considered by itself, might seem to warrant. If the use of iron was invented in Africa, as some believe, it would only be another proof that opportunity is nothing apart from the capacity to grasp it.

Of the Australian aborigines something has been said already. Apart from the Negrito or Negro strain in their blood, they are usually held to belong to that pre-Dravidian stock represented by various jungle tribes in southern India and by the Veddas of Ceylon, connecting links between the two areas being the Sakai of the Malay Peninsula and East Sumatra, and the Toala of Celebes. be worth observing, also, that pre-historic skulls of the Neanderthal type find their nearest parallels in modern Australia. We are here in the presence of some very ancient dispersal. from what centre and in what direction it is hard to imagine. In Australia these early colonists found pleasant, if somewhat lightly furnished, lodgings. In particular there were no dangerous beasts; so that hunting was hardly calculated to put a man on his mettle, as in more exacting climes. Isolation, and the consequent absence of pressure from human intruders, is another fact in the situation. Whatever the causes, the net result was that, despite a very fair environment, away from the desert regions of the interior. man on the whole stagnated. In regard to material comforts and conveniences, the rudeness of their life seems to us appalling. On the other hand, now that we are coming to know something of the inner life and

mental history of the Australians, a somewhat different complexion is put upon the state of their culture. With very plain living went something that approached to high thinking; and we must recognize in this case, as in others, what might be termed a differential evolution of culture, according to which some elements may advance, whilst others stand still, or even

decay.

\To another and a very different people, namely, the Polynesians, the same notion of a differential evolution may be profitably applied. They were in the stone-age when first discovered, and lacked many useful arts. On the other hand, with coco-nut, bananas and bread-fruit, they had abundant means of sustenance, and were thoroughly at home in their magnificent canoes. Thus their islandlife was rich in ease and variety; and, whilst rude in certain respects, they were almost civilized in others. Their racial affinities are somewhat complex. What is almost certain is that they only occupied the Eastern Pacific during the course of the last 1500 years or so. They probably came from Indonesia, mixing to a slight extent with Melanesians on their way. How the proto-Polynesians came into existence in Indonesia is more problematic. Possibly they were the result of a mixture between long-headed immigrants from

eastern India, and round-headed Mongols from Indo-China and the rest of south-eastern Asia, from whom the present Malays are derived.

We have completed our very rapid regional survey of the world; and what do we find? By no means is it case after case of one region corresponding to one type of man and to one type of culture. It might be that, given persistent physical conditions of a uniform kind, and complete isolation, human life would in the end conform to these conditions, or in other words stagnate. No one can tell, and no one wants to know, because as a matter of fact no such environmental conditions occur in this world of ours. Human history reveals itself as a bewildering series of interpenetrations. What excites these movements? Geographical causes, say the theorists of one idea. No doubt man moves forward partly because nature kicks him behind. But in the first place some types of animal life go forward under pressure from nature, whilst others lie down and die. In the second place man has an accumulative faculty, a social memory, whereby he is able to carry on to the conquest of a new environment whatever has served him in the old. But this is as it were to compound environments—a process that ends by making the environment coextensive with the world. Intelligent assimilation of the new by means of the old breaks down the provincial barriers one by one, until man, the cosmopolitan animal by reason of his hereditary constitution, develops a cosmopolitan culture; at first almost unconsciously, but later on with self-conscious intent, because he is no longer content to live, but insists on living well.

As a sequel to this brief examination of the geographic control considered by itself it would be interesting, if space allowed, to append a study of the distribution of the arts and crafts of a more obviously economic and utilitarian type. If the physical environment were all in all, we ought to find the same conditions evoking the same industrial appliances everywhere, without the aid of suggestions from other quarters. Indeed, so little do we know about the conditions attending the discovery of the arts of life that gave humanity its allimportant start—the making of fire, the taming of animals, the sowing of plants, and so on—that it is only too easy to misread our map. We know almost nothing of those movements of peoples, in the course of which a given art was brought from one part of the world to another. Hence, when we find the art duly installed in a particular place, and utilizing the local product, the bamboo in the south, let us say, or the birch in the north, as it naturally does, we easily slip into the error of supposing that the local products of themselves called the art into existence. Similar needs, we say, have generated similar expedients. No doubt there is some truth in this principle; but I doubt if, on the whole, history tends to repeat itself in the case of the great useful inventions. We are all of us born imitators, but inventive genius is rare.

Take the case of the early paleoliths of the drift type. From Egypt, Somaliland, and many other distant lands come examples which Sir John Evans finds "so identical in form and character with British specimens that they might have been manufactured by the same hands." And throughout the palæolithic age in Europe the very limited number and regular succession of forms testifies to the innate conservatism of man, and the slow progress of invention. And yet, as some American writers have argued—who do not find that the distinction between chipped palæoliths and polished neoliths of an altogether later age applies equally well to the New World—it was just as easy to have got an edge by rubbing as by flaking. The fact remains that in the Old World human inventiveness moved along one channel rather than

another, and for an immense lapse of time no one was found to strike out a new line. There was plenty of sand and water for polishing, but it did not occur to their minds to use them.

To wind up this chapter, however, I shall glance at the distribution, not of any implement connected directly and obviously with the utilization of natural products, but of a downright oddity, something that might easily be invented once only and almost immediately dropped again. And yet here it is all over the world, going back, we may conjecture, to very ancient times, and implying interpenetrations of bygone peoples, of whose wanderings perhaps we may never unfold the secret. It is called the "bull-roarer," and is simply a slat of wood on the end of a string, which when whirled round produces a rather unearthly humming sound. Will the anthropo-geographer, after studying the distribution of wood and stringy substances round the globe, venture to prophesy that, if man lived his half a million years or so over again, the bull-roarer would be found spread about very much where it is to-day? "Bull-roarer" is iust one of our local names for what survives now-a-days as a toy in many an old-fashioned corner of the British Isles, where it is also known as boomer, buzzer, whizzer, swish,

and so on. Without going farther afield we can get a hint of the two main functions which it seems to have fulfilled amongst ruder peoples. In Scotland it is, on the one hand, sometimes used to "ca' the cattle hame." A herd-boy has been seen to swing a bull-roarer of his own making, with the result that the beasts were soon running frantically towards the byre. On the other hand, it is sometimes regarded there as a "thunner-spell," a charm against thunder, the superstition being that like cures like, and whatever makes a noise like thunder will be on good terms, so to speak, with the real thunder.

As regards its uses in the rest of the world. it may be said at once that here and there, in Galicia in Europe, in the Malay Peninsula in Asia, and amongst the Bushmen in Africa, it is used to drive or scare animals, whether tame or wild. And this, to make a mere guess, may have been its earliest use, if utilitarian contrivances can generally claim historical precedence, as is by no means certain. As long as man hunted with very inferior weapons, he must have depended a good deal on drives, that either forced the game into a pitfall, or rounded them up so as to enable a concerted attack to be made by the human pack. No wonder that the bull-roarer is sometimes used to bring luck in a mystic way to hunters. More commonly, however, at the present day, the bull-roarer serves another type of mystic purpose, its noise, which is so suggestive of thunder or wind, with a superadded touch of weirdness and general mystery, fitting it to play a leading part in rain-making ceremonies. From these not improbably have developed all sorts of other ceremonies connected with making vegetation and the crops grow, and with making the boys grow into men, as is done at the initiation rites. It is not surprising, therefore, to find a carved human face appearing on the bull-roarer in New Guinea, and again away in North America, whilst in West Africa it is held to contain the voice of a very god. In Australia, too, all their higher notions about a benevolent deity and about religious matters in general seem to concentrate on this strange symbol, outwardly the frailest of toys, yet to the spiritual eye of these simple folk a veritable hely of holies.

And now for the merest sketch of its distribution, the details of which are to be learnt from Dr. Haddon's valuable paper in *The Study of Man*. England, Scotland, Ireland and Wales have it. It can be tracked along central Europe through Switzerland, Germany, and Poland beyond the Carpathians, whereupon ancient Greece with its Dionysiac

mysteries takes up the tale.\* In America it is found amongst the Eskimo, is scattered over the northern part of the continent down to the Mexican frontier, and then turns up afresh in central Brazil. Again, from the Malay Peninsula and Sumatra it extends over the great fan of darker peoples, from Africa, west and south, to New Guinea, Melanesia, and Australia, together with New Zealand alone of Polynesian islands—a fact possibly showing it to have belonged to some earlier race of colonists. Thus in all of the great geographical areas the bull-roarer is found, and that without reckoning in analogous implements like the so-called "buzz," which cover further ground, for instance, the eastern coastlands of Asia. Are we to postulate many independent origins, or else far-reaching transportations by migratory peoples, by the American Indians and the negroes, for example? No attempt can be made here to answer these questions. It is enough to have shown by the use of a single illustration how the study of the geographical distribution of inventions raises as many difficulties as it solves.

Our conclusion, then, must be that the anthropologist, whilst constantly consulting

<sup>&</sup>lt;sup>1</sup> Moreover, in Europe it almost certainly goes back to late-palæolithic times.

his physical map of the world, must not suppose that by so doing he will be saved all further trouble. Geographical facts represent a passive condition, which life, something by its very nature active, obeys, yet in obeying conquers. We cannot get away from the fact we are physically determined. Yet physical determinations have been surmounted by human nature in a way to which the rest of the animal world affords no parallel. Thus man, as the old saying has it, makes love all the year round. Seasonal changes of course affect him, yet he is no slave of the seasons. And so it is with the many other elements involved in the "geographic control." The "road," for instance—that is to say, any natural avenue of migration or communication, whether by land over bridges and through passes, or by sea between harbours and with trade-winds to swell the sails-takes a hand in the game of life, and one that holds many trumps; but so again does the nongeographical fact that your travelling-machine may be your pair of legs, or a horse, or a boat, or a railway, or an airship. Let us be moderate in all things, then, even in our references to the force of circumstances. Circumstances can unmake; but of themselves they never vet made man, nor any other form of life.

## CHAPTER V

## LANGUAGE

THE differentia of man—the quality that marks him off from the other animal kindsis undoubtedly the power of articulate speech. Thereby his mind itself becomes articulate. If language is ultimately a creation of the intellect, yet hardly less fundamentally is the intellect a creation of language. As flesh depends on bone, so does the living tissue of our spiritual life depend on its supporting framework of steadfast verbal forms. genius, the heaven-born benefactor of humanity, is essentially he who wrestles with "thoughts too deep for words," until at last he assimilates them to the scheme of meanings embodied in his mother-tongue, and thus raises them definitely above the threshold of the common consciousness, which is likewise the threshold of the common culture.

There is good reason, then, for prefixing a short chapter on language to an account of those factors in the life of man that together stand on the whole for the principle of freedom—of rational self-direction. Heredity and environment do not, indeed, lie utterly beyond the range of our control. As they are viewed from the standpoint of

human history as a whole, they show each in its own fashion a certain capacity to meet the needs and purposes of the life-force half-way. Regarded abstractly, however, they may conveniently be treated as purely passive and limiting conditions. Here we are with a constitution not of our choosing, and in a world not of our choosing. Given this inheritance, and this environment, how are we, by taking thought and taking risks, to achieve the best-under-the-circumstances? Such is the vital problem as it presents itself to any particular generation of men.

The environment is as it were the enemy. We are out to conquer and enslave it. Our inheritance, on the other hand, is the impelling force we obey in setting forth to fight; it tingles in our blood, and nerves the muscles of our arm. This force of heredity, however, abstractly considered, is blind. Yet, corporately and individually, we fight with eyes that see. This supervening faculty, then, of utilizing the light of experience represents a third element in the situation; and, from the standpoint of man's desire to know himself, the supreme element. The environment, inasmuch as under this conception are included all other forms of life except man, can muster on its side a certain amount of intelligence of a low order. But man's prerogative is to

dominate his world by the aid of intelligence of a high order. When he defied the ice-age by the use of fire, when he outfaced and outlived the mammoth and the cave bear, he was already the rational animal, homo sapiens. In his way he thought, even in those far-off days. And therefore we may assume, until direct evidence is forthcoming to the contrary, that he likewise had language of an articulate kind. He tried to make a speech, we may almost say, as soon as he had learned to stand up on his hind legs.

Unfortunately, we entirely lack the means of carrying back the history of human speech to its first beginnings. In the latter half of the last century, whilst the ferment of Darwinism was freshly seething, all sorts of speculations were rife concerning the origin of language. One school sought the source of the earliest words in imitative sounds of the type of bow-wow; another in interjectional expressions of the type of tut-tut. Or, again, as was natural in Europe, where, with the exception of Basque in a corner of the west, and of certain Asiatic languages, Turkish, Hungarian and Finnish, on the eastern border, all spoken tongues present certain obvious affinities, the comparative philologist undertook to construct sundry great families of speech; and it was hoped that sooner or

later, by working back to some linguistic parting of the ways, the central problem would be solved of the dispersal of the world's races.

These painted bubbles have burst. The further examination of the forms of speech current amongst peoples of rude culture has not revealed a conspicuous wealth either of imitative or of interjectional sounds. On the other hand, the comparative study of the European, or, as they must be termed in virtue of the branch stretching through Persia into India, the Indo-European stock of languages, carries us back three or four thousand years at most—a mere nothing in terms of anthropological time. Moreover, a more extended search through the world, which in many of its less cultured parts furnishes no literary remains that may serve to illustrate linguistic evolution, shows endless diversity of tongues in place of the hoped-for system of a few families; so that half a hundred apparently independent types must be distinguished in North America alone. For the rest, it has become increasingly clear that race and language need not go together at all. What philologist, for instance, could ever discover, if he had no history to help him, but must rely wholly on the examination of modern French, that the bulk of the population of France is connected by way of

blood with ancient Gauls who spoke Celtic, until the Roman conquest caused them to adopt a vulgar form of Latin in its place. The Celtic tongue, in its turn, had, doubtless not so very long before, ousted some earlier type of language, perhaps one allied to the still surviving Basque; though it is not in the least necessary, therefore, to suppose that the Celtic-speaking invaders wiped out the previous inhabitants of the land to a corresponding extent. Races, in short, mix readily; languages, except in very special circumstances, hardly at all.

Disappointed in its hope of presiding over the reconstruction of the distant past of man, the study of language has in recent years tended somewhat to renounce the historical -that is to say, anthropological-method altogether. The alternative is a purely formal treatment of the subject. Thus, whereas vocabularies seem hopelessly divergent in their special contents, the general apparatus of vocal expression is broadly the same every-That all men alike communicate by talking, other symbols and codes into which thoughts can be translated, such as gestures, the various kinds of writing, drum-taps, smoke signals, and so on, being in the main but secondary and derivative, is a fact of which the very universality may easily blind

us to its profound significance. Meanwhile, the science of phonetics—having lost that "guid conceit of itself" which once led it to discuss at large whether the art of talking evolved at a single geographical centre, or at many centres owing to similar capacities of body and mind—contents itself now-a-days for the most part with conducting an analytic survey of the modes of vocal expression as correlated with the observed tendencies of the human speech-organs. And what is true of phonetics in particular is hardly less true of comparative philology as a whole. Its present procedure is in the main analytic or formal. Thus its fundamental distinction between isolating, agglutinative and inflectional languages is arrived at simply by contrasting the different ways in which words are affected by being put together into a sentence. No attempt is made to show that one type of arrangement normally precedes another in time, or that it is in any way more rudimentary—that is to say, less adapted to the needs of human intercourse. It is not even pretended that a given language is bound to exemplify one, and one alone, of these three types; though the process known as analogy—that is, the regularizing of exceptions by treating the unlike as if it were like—will always be apt to establish one system at the expense of the rest.

If, then, the study of language is to recover its old pre-eminence amongst anthropological studies, it looks as if a new direction must be given to its inquiries. And there is much to be said for any change that would bring about this result. Without constant help from the philologist, anthropology is bound to languish. To thoroughly understand the speech of the people under investigation is the field-worker's master-key; so much so, the field-worker's master-key; so much so, that the critic's first question in determining the value of an ethnographical work must always be, Could the author talk freely with the natives in their own tongue? But how is the study of particular languages to be pursued successfully, if it lack the stimulus and inspiration which only the search for general principles can impart to any branch of science? To relieve the hack-work of compiling vocabularies and grammars, there must be present a sense of wider issues involved, and such issues as may directly interest a student devoted to language for its own sake. The formal method of investigating language, in the meantime, can hardly supply the needed spur. Analysis is all very well so long as its ultimate purpose is to subserve genesis—that is to say, evolutionary history. If, however, it tries to set up on its own account, it is in danger of degenerating into

sheer futility. Out of time and history is, in the long run, out of meaning and use. The philologist, then, if he is to help anthropology, must himself be an anthropologist, with a full appreciation of the importance of the historical method. He must be able to set each language or group of languages that he studies in its historical setting. He must seek to show how it has evolved in relation to the needs of a given time. In short, he must correlate words with thoughts; must treat language as a function of the social life.

Here, however, it is not possible to attempt any but the most general characterization of primitive language as it throws light on the workings of the primitive intelligence. For one reason, the subject is highly technical; for another reason, our knowledge about most types of savage speech is backward in the extreme; whilst, for a third and most farreaching reason of all, many peoples, as we have seen, are not speaking the language truly native to their powers and habits of mind, but are expressing themselves in terms imported from another stock, whose spiritual evolution has been largely different. Thus it is at most possible to contrast very broadly and generally the more rudimentary with the more advanced methods that mankind employs

for the purpose of putting its experience into words. Happily the careful attention devoted by American philologists to the aboriginal languages of their continent has resulted in the discovery of certain principles which the rest of our evidence, so far as it goes, would seem to stamp as of world-wide application. The reader is advised to study the most stimulating, if perhaps somewhat speculative, pages on language in the second volume of E. J. Payne's History of the New World called America: or, if he can wrestle with the French tongue, to compare the conclusions here reached with those to which Professor Lévy-Bruhl is led, largely by the consideration of this same American group of languages, in his recent work, Les Fonctions Mentales dans les Sociétés Inférieures ("Mental Functions in the Lower Societies").

If the average man who had not looked

If the average man who had not looked into the matter at all were asked to say what sort of language he imagined a savage to have, he would be pretty sure to reply that in the first place the vocabulary would be very small, and in the second place that it would consist of very short, comprehensive terms—roots, in fact—such as "man," "bear," "eat," "kill," and so on. Nothing of the sort is actually the case. Take the inhabitants of that cheerless spot, Tierra del Fuego,

whose culture is as rude as that of any people on earth. A scholar who tried to put together a dictionary of their language found that he had got to reckon with more than thirty thousand words, even after suppressing a large number of forms of lesser importance. And no wonder that the tally mounted up. For the Fuegians had more than twenty words, some containing four syllables, to express what for us would be either "he" or "she"; then they had two names for the sun, two for the moon, and two more for the full moon, each of the last-named containing four syllables and having no element in common. Sounds, in fact, are with them as copious as ideas are rare. Impressions, on the other hand, are, of course, infinite in number. By means of more or less significant sounds, then, Fuegian society compounds impressions, and that somewhat imperfectly, rather than exchanges ideas, which alone are the currency of true thought.

For instance, I-cut-bear's-leg-at-the-joint-with-a-flint-now corresponds fairly well with the total impression produced by the particular act; though, even so, I have doubtless selectively reduced the notion to something I can comfortably take in, by leaving out a lot of unnecessary detail—for instance, that I was hungry, in a hurry, doing it for the benefit

of others as well as myself, and so on. Well. American languages of the ruder sort, by running a great number of sounds or syllables together, manage to utter a portmanteau word—"holophrase" is the technical name for it—into which is packed away enough suggestions to reproduce the situation in all its detail, the cutting, the fact that I did it, the object, the instrument, the time of the cutting, and who knows what besides. Amusing examples of such portmanteau words meet one in all the text-books. To go back to the Fuegians, their expression mamihla-pinatapai is said to mean "to look at each other hoping that either will offer to do something which both parties desire but are unwilling to do." Now, since exactly the same situation never recurs, but is partly the same and partly different, it is clear that, if the holophrase really tried to hit off in each case the whole outstanding impression that a given situation provoked, then the same combination of sounds would never recur either; one could never open one's mouth without coining a new word. Ridiculous as this notion sounds, it may serve to mark a downward limit from which the rudest types of human speech are not so very far removed. Their well-known tendency to alter their character in a remarkably short time is due largely to the fluid nature of primitive utterance; it being found hard to detach portions, capable of repeated use in an unchanged form, from the composite vocables wherein they register their highly concrete experiences.

Thus in the old Huron-Iroquois language eschoirhon means "I - have - been - to - the water," setsanha "Go - to - the - water," onde quoha "There - is - water - in - the - bucket," daustantewacharet "There - is - water - in - the pot." In this case there is said to have been a common word for "water," awen, which, moreover, is somehow suggested to an aboriginal ear as an element contained in each of these longer forms. In many other cases the difficulty of isolating the common meaning, and fixing it by a common term, has proved too much altogether for a primitive language. You can express twenty different kinds of cutting; but you simply cannot say "cut" at all. No wonder that a large vocabulary is found necessary, when, as in Zulu, "my father," "thy father," "his-or-her-father," are separate polysyllables without any element in common.

The evolution of language, then, on this view, may be regarded as a movement out of, and away from, the holophrastic in the direction of the analytic. When every piece

in your play-box of verbal bricks can be dealt with separately, because it is not joined on in all sorts of ways to the other pieces, then only can you compose new constructions to your liking. Order and emphasis, as is shown by English, and still more conspicuously by Chinese, suffice for sentence-building. Ideally, words should be individual and atomic. Every modification they suffer by internal change of sound, or by having prefixes or suffixes tacked on to them, involves a curtailment of their free use and a sacrifice of distinctness. It is quite easy, of course, to think confusedly, even whilst employing the clearest type of language; though in such a case it is very hard to do so without being quickly brought to book. On the other hand, it is not feasible to attain to a high degree of clear thinking, when the only method of speech available is one that tends towards wordlessness—that is to say, is relatively deficient in verbal forms that preserve their identity in all contexts. Wordless thinking is not in the strictest sense impossible; but its somewhat restricted opportunities lie almost wholly on the farther side, as it were, of a clean-cut vocabulary. For the very fact that the words are crystallized into permanent shape invests them with a suggestion of interrupted continuity, an overtone of unutilized significance, that of itself invites the mind to play with the corresponding fringe of meaning attaching to the concepts that the words embody.

It would prove an endless task if I were to try here to illustrate at all extensively the stickiness, as one might almost call it. of primitive modes of speech. Person, number. case, tense, mood and gender—all these, even in the relatively analytical phraseology of the most cultured peoples, are apt to impress themselves on the very body of the words of which they qualify the sense. But the meagre list of determinations thus produced in an evolved type of language can yield one no idea of the vast medley of complicated forms that serve the same ends at the lower levels of human experience. Moreover, there are many other shades of secondary and circumstantial meaning which in advanced languages are invariably represented by distinct words, so that when not wanted they can be left out, but in a more primitive tongue are apt to run right through the very grammar of the sentence, thus mixing themselves up inextricably with the really substantial elements in the thought to be conveyed. For instance, in some American languages, things are either animate or inanimate, and must be distinguished accordingly by accompanying particles. Or, again, they are classed by similar means as rational or irrational; women, by the bye, being designated amongst the Chiquitos by the irrational sign. Reverential particles, again, are used to distinguish what is high or low in the tribal estimation; and we get in this connection such oddities as the Tamil practice of restricting the privilege of having a plural to high-caste names, such as those applied to gods and human beings, as distinguished from the beasts, which are mere casteless "things." Or, once more, my transferable belongings, "my-spear," or "my-canoe," undergo verbal modifications which are denied to non-transferable possessions such as "my-hand"; "my-child," be it observed, falling within the latter class.

Most interesting of all are distinctions of person. These cannot but bite into the forms of speech, since the native mind is taken up mostly with the personal aspect of things, attaining to the conception of a bloodless system of "its" with the greatest difficulty, if at all. Even the third person, which is naturally the most colourless, because excluded from a direct part of the conversational game, undergoes multitudinous leavening in the light of conditions which the primitive mind regards as highly important,

whereas we should banish them from our thoughts as so much irrelevant "accident." Thus the Abipones in the first place distinguished "he-present," eneha, and "shepresent," anaha, from "he-absent" and "sheabsent." But presence by itself gave too little of the speaker's impression. So, if "he" or "she" were sitting, it was necessary to say hiniha and haneha; if they were walking and in sight ehaha and ahaha, but, if walking and out of sight, ekaha and akaha; if they were lying down, hiriha and haraha, and so on. Moreover, these were all "collective" forms, implying that there were others involved as well. If "he" or "she" were alone in the matter, an entirely different set of words was needed, "he-sitting (alone)" becoming *ynitara*, and so forth. The modest requirements of Fuegian intercourse have called more than twenty such separate pronouns into being.

Without attempting to go thoroughly into the efforts of primitive speech to curtail its interest in the personnel of its world by gradually acquiring a stock of de-individualized words, let us glance at another aspect of the subject, because it helps to bring out the fundamental fact that language is a social product, a means of intersubjective intercourse developed within a society that hands

on to a new generation the verbal experiments that are found to succeed best. Payne shows reason for believing that the collective "we" precedes "I" in the order of linguistic evolution. To begin with, in America and elsewhere, "we" may be inclusive and mean 'all-of-us," or selective, meaning "some-of-usonly." Hence, we are told, a missionary must De very careful, and, if he is preaching, must use the inclusive "we" in saying "we have sinned," lest the congregation assume that only the clergy have sinned; whereas, in oraying, he must use the selective "we," or God would be included in the list of sinners. Similarly, "I" has a collective form amongst some American languages, and this is ordinarily employed, whereas the corresponding selective form is used only in special cases. Thus if the question be "Who will help?" the Apache will reply "I-amongst-others," 'I-for-one"; but, if he were recounting his own personal exploits, he says sheedah, "I-by-nyself," to show that they were wholly his own. Here we seem to have group-consciousness holding its own against individual selfconsciousness, as being for primitive folk on the whole the more normal attitude of mind.

Another illustration of the sociality engrained in primitive speech is to be found n the terms employed to denote relationship. "My-mother," to the child of nature, is something more than an ordinary mother like yours. Thus, as we have already seen, there may be a special particle applying to bloodrelations as non-transferable possessions. Or, again, one Australian language has special duals, "we-two," one to be used between relations generally, another between father and child only. Or an American language supplies one kind of plural suffix for bloodrelations, another for the rest of human beings. These linguistic concretions are enough to show how hard it is for primitive thought to disjoin what is joined fast in the world of everyday experience.

No wonder that it is usually found impracticable by the European traveller who lacks an anthropological training to extract from natives any coherent account of their system of relationships; for his questions are apt to take the form of "Can a man marry his deceased wife's sister?" or what not. Such generalities do not enter at all into the highly concrete scheme of viewing the customs of his tribe imposed on the savage alike by his manner of life and by the very forms of his speech. The so-called "genealogical method" initiated by Dr. Rivers, which the scientific explorer now invariably employs, rests mainly on the use of a concrete type of

procedure corresponding to the mental habits of the simple folk under investigation. John, whom you address here, can tell you exactly whether he may, or may not, marry Mary Anne over there; also he can point out his mother, and tell you her name, and the names of his brothers and sisters. You work round the whole group—it very possibly contains no more than a few hundred members at most-and interrogate them one and all about their relationships to this and that individual whom you name. In course of time you have a scheme which you can treat in your own analytic way to your heart's content; whilst against your system of reckoning affinity you can set up by way of contrast the native system; which can always be obtained by asking each informant what relationshipterms he would apply to the different members of his pedigree, and, reciprocally, what terms they would each apply to him.

Before closing this altogether inadequate sketch of a vast and intricate subject, I would say just one word about the expression of ideas of number. It is quite a mistake to suppose that savages have no sense of number, because the simple-minded European traveller, compiling a short vocabulary in the usual way, can get no equivalent for our

numerals, say from 5 to 10. The fact is that the numerical interest has taken a different turn, incorporating itself with other interests of a more concrete kind in linguistic forms to which our own type of language affords no key at all. Thus in the island of Kiwai, at the mouth of the Fly River in New Guinea, the Cambridge Expedition found a whole set of phrases in vogue, whereby the number of subjects acting on the number of objects at a given moment could be concretely specified. To indicate the action of two on many in the past, they said rudo, in the present durudo; of many on many in the past rumo, in the present durumo; of two on two in the past, amarudo, in the present amadurudo; of many on two in the past amarumo; of many on three in the past ibidurumo, of many on three in the present ibidurudo; of three on two in the present *inturuto*, of three on two in the past, *amabirumo*, and so on. Meanwhile, words to serve the purpose of pure counting are all the scarcer because hands and feet supply in themselves an excellent means not only of calculating, but likewise of communicating, a number. It is the one case in which gesture-language can claim something like an independent status by the side of speech.

For the rest, it does not follow that the mind

fails to appreciate numerical relations, because the tongue halts in the matter of symbolizing them abstractly. A certain high official, when presiding over the Indian census, was informed by a subordinate that it was impossible to elicit from a certain jungle tribe any account of the number of their huts, for the simple and sufficient reason that they could not count above three. The director, who happened to be a man of keen anthropological insight, had therefore himself to come to the rescue. Assembling the tribal elders, he placed a stone on the ground, saying to one "This is your hut," and to another "This is your hut," as he placed a second stone a little way from the first. "And now where is yours?" he asked a third. The natives at once entered into the spirit of the game, and in a short time there was plotted out a plan of the whole settlement, which subsequent verification proved to be both geographically and numerically correct and complete. This story may serve to show how nature supplies man with a ready reckoner in his faculty of perception, which suffices well enough for the affairs of the simpler sort of life. One knows how a shepherd can take in the numbers of a flock at a glance. For the higher flights of experience, however, especially when the unseen and merely possible has to be dealt

with, percepts must give way to concepts; massive consciousness must give way to thinking by means of representations pieced together out of elements rendered distinct by previous dissection of the total impression; in short, a concrete must give way to an analytic way of grasping the meaning of things. Moreover, since thinking is little more or less than, as Plato put it, a silent conversation with oneself, to possess an analytic language is to be more than half-way on the road to the analytic mode of intelligence—the mode of thinking by distinct concepts.

If there is a moral to this chapter, it must be that, whereas it is the duty of the civilized overlords of primitive folk to leave them their old institutions so far as they are not directly prejudicial to their gradual advancement in culture, since to lose touch with one's homeworld is for the savage to lose heart altogether and die; yet this consideration hardly applies at all to the native language. If the tongue of an advanced people can be substituted, it is for the good of all concerned. It is rather the fashion now-a-days amongst anthropologists to lay it down as an axiom that the typical savage and the typical peasant of Europe stand exactly on a par in respect to their power of general intelligence. If by power we are to understand sheer potentiality,

I know of no sufficient evidence that enables us to say whether, under ideal conditions, the average degree of mental capacity would in the two cases prove the same or different. But I am sure that the ordinary peasant of Europe, whose society provides him, in the shape of an analytic language, with a readymade instrument for all the purposes of clear thinking, starts at an immense advantage, as compared with a savage whose traditional speech is holophrastic. Whatever be his mental power, the former has a much better chance of making the most of it under the given circumstances. "Give them the words so that the ideas may come," is a maxim that will carry us far, alike in the education of children, and in that of the peoples of lower culture, of whom we have charge.

## CHAPTER VI

## SOCIAL ORGANIZATION

IF an explorer visits a savage tribe with intent to get at the true meaning of their life, his first duty, as every anthropologist will tell him, is to acquaint himself thoroughly with the social organization in all its forms. The reason for this is simply that only by studying

the outsides of other people can we hope to arrive at what is going on inside them. "Institutions" will be found a convenient word to express all the externals of the life of man in society, so far as they reflect intelligence and purpose. Similarly, the internal or subjective states thereto corresponding may be collectively described as "beliefs." Thus, the field-worker's cardinal maxim can be phrased as follows: Work up to the beliefs by way of the institutions.

Further, there are two ways in which a given set of institutions can be investigated, and of these one, so far as it is practicable, should precede the other. First, the institutions should be examined as so many wheels in a social machine that is taken as if it were standing still. You simply note the characteristic make of each, and how it is placed in relation to the rest. Regarded in this static way, the institutions appear as "forms of social organization." Afterwards, the machine is supposed to be set going, and you contemplate the parts in movement. Regarded thus dynamically, the institutions appear as "customs."

"customs."
In this chapter, then, something will be said about the forms of social organization prevailing amongst peoples of the lower culture. Our interest will be confined to the

social morphology. In subsequent chapters we shall go on to what might be called, by way of contrast, the physiology of social life. In other words, we shall briefly consider the legal and religious customs, together with the associated beliefs.

How do the forms of social organization come into being? Does some one invent them? Does the very notion of organization imply an organizer? Or, like Topsy, do they simply grow? Are they natural crystallizations that take place when people are thrown together? For my own part, I think that, so long as we are pursuing anthropology and not philosophy—in other words, are piecing together events historically according as they appear to follow one another, and are not discussing the ultimate question of the relation of mind to matter, and which of the two in the long run governs which—we must be prepared to recognize both physical necessity and spiritual freedom as interpenetrating factors in human life. In the meantime, when considering the subject of social organization, we shall do well, I think, to keep asking ourselves all along, How far does force of circumstances, and how far does the force of intelligent purpose, account for such and such a net result?

If I were called upon to exhibit the chief

determinants of human life as a single chain of causes and effects—a simplification of the historical problem, I may say at once, which I should never dream of putting forward except as a convenient fiction, a device for making research easier by providing it with a central line—I should do it thus. Working backwards, I should say that culture depends on social organization; social organization on numbers: numbers on food: and food on invention. Here both ends of the series are represented by spiritual factors-namely, culture at the one end, and invention at the other. Amongst the intermediate links, food and numbers may be reckoned as physical factors.\ Social organization, however, seems to face in both directions at once, and to be something half-way between a spiritual and a physical manifestation.

In placing invention at the bottom of the scale of conditions, I definitely break with the opinion that human evolution is throughout a purely "natural" process. Of course, you can use the word "natural" so widely and vaguely as to cover everything that was, or is, or could be. If it be used, however, so as to exclude the "artificial," then I am prepared to say that human life is preeminently an artificial construction, or, in other words, a work of art; the distinguishing

mark of man consisting precisely in the fact that he alone of the animals is capable of art.

It is well known how the invention of machinery in the middle of the eighteenth century brought about that industrial revolution, the social and political effects of which are still developing at this hour. Well, I venture to put it forward as a proposition which applies to human evolution, so far back as our evidence goes, that history is the history of great inventions. Of course, it is true that climate and geographical conditions in general help to determine the nature and quantity of the food-supply; so that, for instance, however much versed you may be in the art of agriculture, you cannot get corn to grow on the shores of the Arctic sea. But, given the needful inventions, superior weapons for instance, you need never allow yourselves to be shoved away into such an inhospitable region; to which you presumably do not retire voluntarily, unless, indeed, the state of your arts-for instance, your skill in hunting or taming the reindeer-inclines you to make a paradise of the tundra.

Suppose it granted, then, that a given people's arts and inventions, whether directly or indirectly productive, are capable of a certain average yield of food, it is certain, as Malthus and Darwin would remind us, that human fertility can be reckoned on to bring the numbers up to a limit bearing a more or less constant ratio to the means of subsistence.

At length we reach our more immediate subject-namely, social organization. In what sense, if any, is social organization dependent on numbers? Unfortunately, it is too large a question to thrash out here. I may, however, refer the reader to the ingenious classification of the peoples of the world, by reference to the degree of their social organization and culture, which is attempted by Mr. Sutherland in his Origin and Growth of the Moral Instinct. He there tries to show that a certain size of population can be correlated with each grade in the scale of human evolution-at any rate up to the point at which full-blown civilization is reached, when cases like that of Athens under Pericles, or Florence under the Medici, would probably cause him some trouble. For instance, he makes out that the lowest savages, Veddas, Pygmies, and so on, form groups of from ten to forty; whereas those who are but one degree less backward, such as the Australian natives. average from fifty to two hundred; whilst most of the North American tribes, who represent the next stage of general advance, run

from a hundred up to five hundred. At this point he takes leave of the peoples he would class as "savage," their leading characteristic from the economic point of view being that they lead the more or less wandering life of hunters or of mere "gatherers." He then goes on to arrange similarly, in an ascending series of three divisions, the peoples that he terms "barbarian." Economically they are either sedentary, with a more or less developed agriculture, or, if nomad, pursue the pastoral mode of life. His lowest type of group, which includes the Iroquois, Maoris, and so forth, ranges from one thousand to five thousand; next come loosely organized states, such as Dahomey or Ashanti, where the numbers may reach one hundred thousand; whilst he makes barbarism culminate in more firmly compacted communities, such as are to be found, for example, in Abyssinia or Madagascar, the population of which he places at about half a million.

Now I am very sceptical about Mr. Sutherland's statistics, and regard his bold attempt to assign the world's peoples each to their own rung on the ladder of universal culture as, in the present state of our knowledge, no more than a clever hypothesis; which some keen anthropologist of the future might find it well worth his while to put thoroughly to the test. At a guess, however, I am disposed to accept his general principle that, on the whole and in the long run, during the earlier stages of human evolution, the complexity and coherence of the social order follow upon the size of the group; which, since its size, in turn, follows upon the mode of the economic life, may be described as the food-group.

Besides food, however, there is a second elemental condition which vitally affects the human race; and that is sex. Social organization thus comes to have a twofold aspect, On the one hand, and perhaps primarily, it is an organization of the food-quest. On the other hand, hardly less fundamentally, it is an organization of marriage In what follows, the two aspects will be considered more or less together, as to a large extent they overlap. Primitive men, like other social animals. hang together naturally in the hunting pack, and no less naturally in the family; and at a very rudimentary stage of evolution there probably is very little distinction between the two. When, however, for some reason or other which anthropologists have still to discover, man takes to the institution of exogamy, the law of marrying-out, which forces men and women to unite who are members of more or less distinct food-groups, then, as we shall presently see, the matrimonial aspect of social organization tends to overshadow the politico-economic; if only because the latter can usually take care of itself, whereas to marry a perfect stranger is an embarrassing operation that might be expected to require a certain amount of arrangement on both sides.

To illustrate the pre-exogamic stage of human society is not so easy as it may seem; for, though it is possible to find examples, especially amongst Negritos such as the Andamanese or Bushmen, of peoples of the rudest culture, and living in very small communities, who apparently know neither exogamy nor what so often accompanies it, namely, totemism, we can never be certain whether we are dealing in such a case with the genuinely primitive, or merely with the degenerate. For instance, the chapter on the forms of social organization in Professor Hobbouse's Morals in Evolution starts off with an account of the system in vogue amongst the Veddas of the Ceylon jungle, his description being founded on the excellent observations of the brothers Sarasin. Now it is perfectly true that some of the Veddas appear to afford a perfect instance of what is sometimes called "the natural family." A tract of a few miles square forms the beat of

a small group of families, four or five at most, which, for the most part, singly or in pairs, wander round hunting, fishing, gathering honey and digging up the wild yams; whilst they likewise take shelter together in shallow caves, where a roof, a piece of skin to lie on—though this is not essential—and, that most precious luxury of all, a fire, represent, apart from food, the sum total of their creature comforts.

Now, under these circumstances, it is not, perhaps, wonderful that the relationships within a group should be decidedly close. Indeed, the correct thing is for the children of a brother and sister to marry; though not, it would seem, for the children of two brothers or of two sisters. And yet there is no approach to promiscuity, but, on the contrary, a very strict monogamy, infidelities being as rare as they are deeply resented. That they had clans of some sort was, indeed, known to Professor Hobhouse and to the authorities whom he follows; but these clans are dismissed as having but the slightest organization and very few functions. An entirely new light, however, has been thrown on the meaning of this clan-system by the recent researches of Dr. and Mrs. Seligmann. It now turns out that some of the Veddas are exogamous—that is to say, are obliged by

custom to marry outside their own clan—though others are not. The question then arises, Which, for the Veddas, is the older system, marrying-out or marrying-in? Seeing what a miserable remnant the Veddas are, I cannot but believe that we have here the case of a formerly exogamous people, groups of which have been forced to marry-in, simply because the alternative was not to marry at all. Of course, it is possible to argue that in so doing they merely reverted to what was once everywhere the primeval condition of man. But at this point historical science tails off into mere guesswork.

We reach relatively firm ground, on the other hand, when we pass on to consider the social organization of such exogamous and totemic peoples as the natives of Australia. The only trouble here is that the subject is too vast and complicated to permit of a handling at once summary and simple. Perhaps the most useful thing that can be done for the reader in a short space is to provide him with a few elementary distinctions, applying not only to the Australians, but more or less to totemic societies in general. With the help of these he may proceed to grapple for himself with the mass of highly interesting but bewildering details concerning social

organization to be found in any of the lead ing first-hand authorities. For instance, for Australia he can do no better than consult the two fascinating works of Messrs. Spencer and Gillen on the Central tribes, or the no less illuminating volume of Howitt on the natives of the South-eastern region; whilst for North America there are many excellent monographs to choose from amongst those issued by the Bureau of Ethnology of the Smithsonian Institution. Or, if he is content to allow some one else to collect the material for him, his best plan will be to consult Dr. Frazer's monumental treatise, Totemism and Exogamy, which epitomizes the known facts for the whole wide world, as surveyed region by region.

The first thing to grasp is that, for peoples of this type social organization is, primarily and on the face of it, identical with kinship-organization. Before proceeding further, let us see what kinship means. Distinguish kinship from consanguinity. Consanguinity is a physical fact. It depends on birth, and covers all one's real blood-relationships, whether recognized by society or not. Kinship, on the other hand, is a sociological fact. It depends on the conventional system of counting descent. Thus it may exclude real relationships; whilst, contrariwise, it may include such as are purely fictitious, as when

some one is allowed by law to adopt a child as if it were his own. Now, under civilized conditions, though there is, as we have just seen, such an institution as adoption, whilst, again, there is the case of the illegitimate child, who can claim consanguinity, but can never, in English law at least, attain to kinship, yet, on the whole, we are hardly conscious of the difference between the genuine blood-tie and the social institution that is modelled more or less closely upon it. In primitive society, however, consanguinity tends to be wider than kinship by as much again. In other words, in the recognition of kinship one entire side of the family is usually left clean out of account. A man's kin comprises either his mother's people or his father's people, but not both. Remember that, by the law of exogamy, the father and mother are strangers to each other. Hence, primitive society, as it were, issues a judgment of Solomon to the effect that, since they are not prepared to halve their child, it must belong body and soul either to one party or to the other.

We may now go on to analyse this onesided type of kinship-organization a little more fully. There are three elementary principles that combine to produce it. They are exogamy, lineage and totemism. A word must be said about each in turn. Exogamy presents no difficulty until you try to account for its origin. It simply means marrying-out, in contrast to endogamy, or marrying-in. Suppose there were a village composed entirely of McIntyres and McIntoshes, and suppose that fashion compelled every McIntyre to marry a McIntosh, and every McIntosh a McIntyre, whilst to marry an outsider, say a McBean, was bad form for McIntyres and McIntoshes alike; then the two clans would be exogamous in respect to each other, whereas the village as a whole

would be endogamous.

Lineage is the principle of reckoning descent along one or other of two lines—namely, the mother's line or the father's. The former method is termed matrilineal, the latter patrilineal. It sometimes, but by no means invariably, happens, when descent is counted matrilineally, that the wife stays with her people, and the husband has the status of a mere visitor and alien. In such a case the marriage is called matrilocal; otherwise it is patrilocal. Again, when the matrilocal type of marriage prevails, as likewise often when it does not, the wife and her people, rather than the father and his people, exercise supreme authority over the children. This is known as the matripotestal, as contrasted with the patripotestal, type of family.

When the matrilineal, matrilocal and matripotestal conditions are found together, we have mother-right at its fullest and strongest. Where we get only two out of the three, or merely the first by itself, most authorities would still speak of mother-right; though it may be questioned how far the word mother-right, or the corresponding, now almost discarded, expression, "the matriarchate," can be safely used without further explanation, since it tends to imply a right (in the legal sense) and an authority, which in these circumstances is often no more than nominal.

Totemism, in the specific form that has to do with kinship, means that a social group depends for its identity on a certain intimate and exclusive relation in which it stands towards an animal-kind, or a plant-kind, or, more rarely, a class of inanimate objects, or, very rarely, something that is individual and not a kind or class at all. Such a totem, in the first place, normally provides the social group with its name. (The Boy Scouts, who call themselves Foxes, Peewits, and so on, according to their different patrols, have thus reverted to a very ancient usage.) In the second place, this name tends to be the outward and visible sign of an inward and spiritual grace that, somehow flowing from the totem to the totemites, sanctifies their communion. They are

"all-one-flesh" with one another, as certain of the Australians phrase it, because they are "all-one-flesh" with the totem. Or, again, a man whose totem was ngaui, the sun, said that his name was ngaui and he "was" ngaui; though he was equally ready to put it in another way, explaining that ngaui "owned" him. If we wish to express the matter comprehensively, and at the same time to avoid language suggestive of a more advanced mysticism, we may perhaps describe the totem as, from this point of view, the totemite's "luck."

There is considerable variation, however, to be found in the practices and beliefs of a more or less religious kind that are associated with this form of totemism; though almost always there are some. Sometimes the totem is thought of as an ancestor, or as the common fund of life out of which the totemites are born and into which they go back when they die. Sometimes the totem is held to be a very present help in time of trouble, as when a kangaroo, by hopping along in a special way, warns the kangaroo-man of impending danger. Sometimes, on the other hand, the kangarooman thinks of himself mainly as the helper of the kangaroo, holding ceremonies in order that the kangaroos may wax fat and multiply. Again, almost invariably the totemite shows

some respect towards his totem, refraining, for instance, from slaying and eating the totem-animal, unless it be in some specially solemn and sacramental way.

The upshot of these considerations is that if the totem is, on the face of it, a name, the savage answers the question, "What's in a name?" by finding in the name that makes him one with his brethren a wealth of mystic meaning, such as deepens for him the feeling of social solidarity to an extent that it takes a great effort on our part to appreciate.

Having separately examined the three principles of exogamy, lineage and totemism, we must now try to see how they work together. Generalization in regard to these matters is extremely risky, not to say rash; nevertheless, the following broad statements may serve the reader as working hypotheses, that he can go on to test for himself by looking into the facts. Firstly, exogamy and totemism, whether they be in origin distinct or not, tend in practice to go pretty closely together. Secondly, lineage, or the one-sided system of reckoning descent, is more or less independent of the other two principles.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> That is to say, either mother-right or father-right in any of their forms may exist in conjunction with exogamy and totemism. It is certainly not the fact that, wherever totemism is in a state of vigour, mother-right is regularly

If, instead of consulting the evidence that is to hand about the savage world as it exists to-day, you read some book crammed full with theories about social origins, you probably come away with the impression that totemic society is entirely an affair of clans. Some such notion as the following is precipitated in your mind. You figure to yourself two small food-groups, whose respective beats are, let us say, on each side of a river. For some unknown reason they are totemic, one group calling itself Cockatoo, the other calling itself Crow, whilst each feels in consequence that its members are "all-one-flesh" in some mysterious and moving sense. Again, for some unknown reason each is exogamous, so that matrimonial alliances are bound to take place across the river. Lastly, each has mother-right of the full-blown kind. The Cockatoo-girls and the Crow-girls abide each on their own side of the river, where they are visited by partners from across the water; who, whether they tend to stay and make themselves useful, or are merely intermittent in their attentions, remain outsiders from the totemic point of view and are treated as such.

found. At most it may be urged in favour of the priority of mother-right that, if there is change, it is invariably from mother-right to father-right, and never the other way about.

The children, meanwhile, grow up in the Cockatoo and Crow quarters respectively as little Cockatoos or Crows. If they need to be chastised, a Cockatoo hand, not necessarily the mother's, but perhaps her brother's—never the father's, however—administers the slap. When they grow up, they take their chances for better and worse with the mother's people; fighting when they fight, though it be against the father's people; sharing in the toils and the spoils of the chase; inheriting the weapons and any other property that is handed on from one generation to another; and, last but not least, taking part in the totemic mysteries that disclose to the elect the inner meaning of being a Cockatoo or a Crow, as the case may be.

Now such a picture of the original clan and of the original inter-clan organization is very pretty and easy to keep in one's head. And when one is simply guessing about the first beginnings of things, there is something to be said for starting from some highly abstract and simple concept, which is afterwards elaborated by additions and qualifications until the developed notion comes near to matching the complexity of the real facts. Such speculations, then, are quite permissible and even necessary in their place. To do justice, however, to the facts about totemic

society, as known to us by actual observation, it remains to note that the clan is by no means the only form of social organization that it

displays.

The clan, it is true, whether matrilineal or patrilineal, tends at the totemic level of society to eclipse the family. The natural family, of course—that is to say, the more or less permanent association of father, mother and children, is always there in some shape and to some extent. But, so long as the one-sided method of counting descent prevails, and is reinforced by totemism, the family cannot attain to the dignity of a formally recognized institution. On the other hand, the totemic clan, of all the formally recognized groupings of society to which an individual belongs in virtue of his birth and kinship, is, so to speak, the most specific. As the Australian puts it, it makes him what he "is." His social essence is to be a Cockatoo or a Crow. Consequently his first duty is towards his clan and its members, human and not-human. Wherever there are clans. and so long as there is any totemism worthy of the name, this would seem to be the general law.

Besides the specific unity, however, provided by the clan, there are wider, and, as it were, more generic unities into which a man is

born, in totemic society of the complex type that is found in the actual world of to-day.

First, he belongs to a phratry. In Australia the tribe—a term to be defined presently—is nearly always split up into two exogamous divisions, which it is usual to call phratries.1 Then, in some of the Australian tribes, the phratry is subdivided into two. and, in others, into four portions, between which exogamy takes place according to a curious criss-cross scheme. These exogamous subdivisions, which are peculiar to Australia, are known as matrimonial classes. Dr. Frazer thinks that they are the result of deliberate arrangement on the part of native statesmen; and certainly he is right in his contention that there is an artificial and man-made look about them. The system of phratries, on the other hand, whether it carves up the tribe into two, or, as sometimes in North America and elsewhere, into more than two primary divisions, under which the clans tend to group themselves in a more or less orderly way, has all the appearance of a natural development out of the clan-system. Thus, to revert to the imaginary case of the Cockatoos and Crows practising exogamy across the river, it seems easy to understand how the numbers

From a Greek word meaning "brotherhood," which was applied to a very similar institution.

on both sides might increase until, whilst remaining Cockatoos and Crows for cross-river purposes, they would find it necessary to adopt among themselves subordinate distinctions; such as would be sure to model themselves on the old Cockatoo-Crow principle of separate totemic badges. But we must not wander off into questions of origin. It is enough for our present purpose to have noted the fact that, within the tribe, there are normally other forms of social grouping into which a man is born, as well as the clan.

Now we come to the tribe. This may be described as the political unit. Its constitution tends to be lax and its functions vague. One way of seizing its nature is to think of it as the social union within which exogamy takes place. The intermarrying groups naturally hang together, and are thus in their entirety endogamous, in the sense that marriage with pure outsiders is disallowed by custom. Moreover, by mingling in this way, they are likely to attain to the use of a common dialect, and a common name, speaking of themselves, for instance, as "the men," and lumping the rest of humanity together as "foreigners." To act together, however, as, for instance, in war, in order to repel incursions on the part of the said foreigners, is not easy without some definite

organization. In Australia, where there is very little war, this organization is mostly wanting. In North America, on the other hand, amongst the more advanced and war-like tribes, we find regular tribal officers, and some approach to a political constitution. Yet in Australia there is at least one occasion when a sort of tribal gathering takes place—namely, when their elaborate ceremonies for the initiation of the youths is being held.

It would seem, however, that these ceremonies are, as often as not, intertribal rather than tribal. So similar are the customs and beliefs over wide areas, that groups with apparently little or nothing else in common will assemble together, and take part in proceedings that are something like a Pan-Anglican Congress and a World's Fair rolled into one. To this indefinite type of intertribal association the term "nation" is sometimes applied. Only when there is definite organization, as never in Australia, and only occasionally in North America, as amongst the Iroquois, can we venture to describe it as a genuine "confederacy."

No doubt the reader's head is already in a whirl, though I have perpetrated endless sins of omission and, I doubt not, of commission as well, in order to simplify the glorious confusion of the subject of the social organization prevailing in what is conveniently but loosely lumped together as totemic society. Thus. I have omitted to mention that sometimes the totems seem to have nothing to do at all with the social organization; as, for example, amongst the famous Arunta of central Australia, whom Messrs. Spencer and Gillen have so carefully described. I have, again, refrained from pointing out that sometimes there are exogamous divisionssome would call them moieties to distinguish them from phratries—which have no clans grouped under them, and, on the other hand, have themselves little or no resemblance to totemic clans. These, and ever so many other exceptional cases, I have simply passed by.

An even more serious kind of omission is the following. I have throughout identified the social organization with the kinship organization—namely, that into which a man is born in consequence of the marriage laws and the system of reckoning descent. But there are other secondary features of what can only be classed as social organization, which have nothing to do with kinship. Sex, for instance, has a direct bearing on social status. The men and the women often form markedly distinct groups; so that we are almost reminded of the way in which the male

and the female linnets go about in separate flocks as soon as the pairing season is over. Of course, disparity of occupation has something to do with it. But, for the native mind, the difference evidently goes far deeper than that. In some parts of Australia there are actually sex-totems, signifying that each sex is all-one-flesh, a mystic corporation. And, all the savage world over, there is a feeling that woman is uncanny, a thing apart, which feeling is probably responsible for most of the special disabilities—and the special privileges—that are the lot of woman at the present day.

Again, age likewise has considerable influence on social status. It is not merely a case of being graded as a youth until once for all you legally "come of age," and are enrolled amongst the men. The grading of ages is frequently most elaborate, and each batch mounts the social ladder step by step. Just as, at the university, each year has apportioned to it by public opinion the things it may do and the things it may not do, whilst, later on, the bachelor, the master, and the doctor stand each a degree higher in respect of academic rank; so in darkest Australia, from youth up to middle age at least, a man will normally undergo a progressive initiation into the secrets of life, accompanied by a

steady widening in the sphere of his social duties and rights.

Lastly, locality affects status, and increasingly as the wandering life gives way to stable occupation. Amongst a few hundred people who are never out of touch with each other, the forms of natal association hold their own against any that local association is likely to suggest in their place. According to natal grouping, therefore, in the broad sense that includes sex and age no less than kinship, the members of the tribe camp, fight, perform magical ceremonies, play games, are initiated, are married, and are buried. But let the tribe increase in numbers, and spread through a considerable area, over the face of which communications are difficult and proportionately rare. Instantly the local group tends to become all in all. Authority and initiative must always rest with the men on the spot; and the old natal combinations, weakened by inevitable absenteeism, at last cease to represent the true framework of the social order. They tend to linger on, of course, in the shape of subordinate institutions. For instance, the totemic groups cease to have direct connection with the marriage system, and, on the strength of the ceremonies associated with them, develop into what are known as secret societies. Or.

again, the clan is gradually overshadowed by the family, so that kinship, with its rights and duties, becomes practically limited to the nearer blood-relations; who, moreover, begin to be treated for practical purposes as kinsmen. even when they are on the side of the family which lineage does not officially Thus the forms of natal associarecognize. tion no longer constitute the backbone of the body politic. Their public importance has gone. Henceforward, the social unit is the local group. The territorial principle comes more and more to determine affinities and functions. Kinship has dethroned itself by its very success. Thanks to the organizing power of kinship, primitive society has grown, and by growing has stretched the birth-tie until it snaps. Some relationships become distant in a local and territorial sense, and thereupon they cease to count. My duty towards my kin passes into my duty towards my neighbour.

Reasons of space make it impossible to survey the further developments to which social organization is subject under the sway of locality. It is, perhaps, less essential to insist on them here, because, whereas totemic society is a thing which we civilized folk have the very greatest difficulty in understanding, we

all have direct insight into the meaning of a territorial arrangement; since, from the village community up to the modern state, the same fundamental type of social structure obtains throughout.

Besides local contiguity, however, there is a second principle which greatly helps to shape the social order, as soon as society is sufficiently advanced in its arts and industries to have taken firm root, so to speak, on the earth's surface. This is the principle of private property, and especially of private property in land. The most fundamental of class distinctions is that between rich and poor. That between free and slave, in communities that have slavery, is not at first sight strictly parallel, since there may be a class of poor freemen intermediate between the nobles and the slaves; but it is obvious that in this case, too, private property is really responsible for the mode of grading. sometimes social position may seem to depend primarily on industrial occupation, the Indian caste-system providing an instance in point. Since, however, the most honourable occupations in the long run coincide with those that pay best, we come back once again to private property as the ultimate source of social rank, under an economic system of the more developed kind.

In this brief sketch it has been impossible to do more than hint how social organization is relative to numbers, which in their turn are relative to the skill with which the foodquest is carried on. But if, up to a certain point, it be true that the structure of society depends on its mass in a more or less physical way, there is to be borne in mind another aspect of the matter, which also has been hinted at as we went rapidly along. A good deal of intelligence has throughout helped towards the establishing of the social order. If social organization is in part a natural result of the expansion of the population, it is partly also, in the best sense of the word, an artificial creation of the human mind which has exerted itself to devise modes of grouping whereby men might be enabled to work together in larger and ever larger wholes Regarded, however, in the purely external

way which a study of its mere structure involves, society appears as a machine—that is to say, appears as the work of intelligence indeed, but not as itself instinct with intelligence. In what follows we shall set the social machine moving. We shall then have a better chance of obtaining an inner view of the driving power. We shall find that we have to abandon the notion that society is a machine. It is more, even, than an organism. It is a

communion of souls—souls that, as so many independent, yet interdependent, manifestations of the life-force, are pressing forward in the search for individuality and freedom.

## CHAPTER VII

## LAW

THE general plan of this little book being to start from the influences that determine man's destiny in a physical, external, necessary sort of way, and to work up gradually to the spiritual, internal, voluntary factors in human nature—that strange "compound of clay and flame "—it seems advisable to consider law before religion, and religion before morality, whether in its collective or individual aspect, for the following reason. There is more sheer constraint to be discerned in law than in religion, whilst religion, in the historical sense which identifies it with organized cult, is more coercive in its mode of regulating life than the moral reason, which compels by force of persuasion.

To one who lives under civilized conditions the phrase "the strong arm of the law" inevitably suggests the policeman. Apart from policemen, magistrates, and the soldiers

who in the last resort must be called out to enforce the decrees of the community/ it might appear that law could not exist. And certainly it is hard to admit that what is known as mob-law is any law at all. For historical purposes, however, we must be prepared to use the expression "law" rather widely. We must be ready to say that there is law wherever there is punishment on the part of a human society, whether acting in the mass, or through its representatives. Punishment means the infliction of pain on one who is judged to have broken a social rule. Conversely, then, a law is any social rule to the infringement of which punishment is by usage attached. So long as it is recognized that a man breaks a social rule at the risk of pain, and that it is the business of everybody, or of somebody armed with the common authority, to make that risk a reality for the offender, there is law within the meaning of the term as it exists for anthropology.

Punishment, however, is by its very nature an exceptional measure. It is only because the majority are content to follow a social rule, that law and punishment are possible at all. If, again, every one habitually obeys the social rules, law ceases to exist, because it is unnecessary. Now, one reason why it is hard to find any law in primitive society is because,

in a general way of speaking, no one dreams of breaking the social rules.

Custom is king, nay tyrant, in primitive society. When Captain Cook asked the chiefs of Tahiti why they ate apart and alone, they simply replied, "Because it is right." And so it always is with the ruder peoples. the custom, and there's an end on't" is their notion of a sufficient reason in politics and ethics alike. Now that way lies a rigid conservatism. In the chapter on morality we shall try to discover its inner springs, its psychological conditions. For the present, we may be content to regard custom from the outside, as the social habit of conserving all traditional practices for their own sake and regardless of consequences. Of course, changes are bound to occur, and do occur. But they are not supposed to occur. In theory, the social rules of primitive society are like "the law of the Medes and Persians which altereth not."

This absolute respect for custom has its good and its bad sides. On the one hand, it supplies the element of discipline; without which any society is bound soon to fall to pieces. We are apt to think of the savage as a freakish creature, all moods—at one moment a friend, at the next moment a fiend. So he might be, if it were not for the social drill

imposed by his customs. So he is, if you destroy his customs, and expect him nevertheless to behave as an educated and reasonable being. Given, then, a primitive society in a healthy and uncontaminated condition, its members will invariably be found to be on the average more law-abiding, as judged from the standpoint of their own law, than is the case in any civilized state.

But now we come to the bad side of custom. Its conserving influence extends to all traditional practices, however unreasonable or perverted. In that amber any fly is apt to be enclosed. Hence the whimsicalities of savage custom. In Primitive Culture Sir E. Tylor tells a good story about the Dyaks of Borneo. The white man's way of chopping down a tree by notching out V-shaped cuts was not according to Dyak custom. Hence any Dyak caught imitating the European fashion was punished by a fine. And yet so well aware were they that this method was an improvement on their own that, when they could trust each other not to tell, they would surreptitiously use it. These same Dyaks, it may be added, are, according to Mr. A. R. Wallace, the best of observers, "among the most pleasing of savages." They are goodnatured, mild, and by no means bloodthirsty in the ordinary relations of life. Yet they are

well known to be addicted to the horrid practice of head-hunting. "It was a custom," Mr. Wallace explains, "and as a custom was observed, but it did not imply any extraordinary barbarism or moral delinquency."

The drawback, then, to a reign of pure custom is this: Meaningless injunctions abound, since the value of a traditional practice does not depend on its consequences, but simply on the fact that it is the practice; and this element of irrationality is enough to perplex, till it utterly confounds, the mind capable of rising above routine and reflecting on the true aims and ends of the social life. How to break through "the cake of custom," as Bagehot has called it, is the hardest lesson that humanity has ever had to learn. Customs have often been broken up by the clashing of different societies; but in that case they merely crystallize again into new shapes. But to break through custom by the sheer force of reflection, and so to make rational progress possible, was the intellectual feat of one people, the ancient Greeks: and it is at least highly doubtful if, without their leadership, a progressive civilization would have existed to-day.

It may be added in parenthesis that customs may linger on indefinitely, after losing, through one cause or another, their place amongst the vital interests of the community. They are, or at any rate seem, harmless; their function is spent. Hence, whilst perhaps the humbler folk still take them more or less seriously, the leaders of society are not at pains to suppress them. Nor would they always find it easy to do so. Something of the primeval man lurks in us all; and these "survivals," as they are termed by the anthropologist, may often in large part correspond to impulses that are by no means dead in us, but rather sleep; and are hence liable to be reawakened, if the environment happens to supply the appropriate stimulus. Witness the fact that survivals, especially when the whirliging of social change brings the uneducated temporarily to the fore, have a way of blossoming forth into revivals; and the state may in consequence have to undergo something equivalent to an operation for appendicitis. The study of so-called survivals, therefore, is a most important branch of anthropology, which cannot unfortunately in this hasty sketch be given its due. It would seem to coincide with the central interest of what is known as folk-lore. Folk-lore, however, tends to broaden out till it becomes almost indistinguishable from general anthropology. There are at least two reasons for this. Firstly, the survivals of custom amongst advanced nations, such as

the ancient Greeks or the modern British, are to be interpreted mainly by comparison with the similar institutions still flourishing amongst ruder peoples. Secondly, all these ruder peoples themselves, without exception, have their survivals too. Their customs fall as it were into two layers. On top is the live part of the fire. Underneath are smouldering ashes, which, though dying out on the whole, are yet liable here and there to rekindle into flame.

So much for custom as something on the face of it distinct from law, inasmuch as it seems to dispense with punishment/ It remains to note, however, that brute force lurks behind custom, in the form of what Bagehot has called "the persecuting tendency." Just as a boy at school who happens to offend against the unwritten code has his life made a burden by the rest of his mates, so in the primitive community the fear of a rough handling causes "I must not" to wait upon "I dare not." One has only to read Mr. Andrew Lang's instructive story of the fate of "Why Why, the first Radical," to realize how amongst savages—and is it so very different amongst ourselves ?-it pays much better to be respectable than to play the moral hero.

Let us pass on to examine the beginnings of punitive law. After all, even under the sway of custom, casual outbreaks are liable to occur. Some one's passions will prove too much for him, and there will be an accident. What happens then in the primitive society? Let us first consider one of the very unorganized communities at the bottom of the evolutionary scale; as, for example, the little Negritos of the Andaman Islands. Their justice, explains Mr. Man, in his excellent account of these people, is administered by the simple method of allowing the aggrieved party to take the law into his own hands. This he usually does by flinging a burning faggot at the offender, or by discharging an arrow at him, though more frequently near him. Meanwhile all others who may be present are apt to beat a speedy retreat, carrying off as much of their property as their haste will allow, and remaining hid in the jungle until sufficient time has elapsed for the quarrel to have blown over. Sometimes, however, friends interpose, and seek to deprive the disputants of their weapons. Should, however, one of them kill the other, nothing is necessarily said or done to him by the rest. Yet conscience makes cowards of us all; so that the murderer, from prudential motives, will not uncommonly absent himself until he

judges that the indignation of the victim's friends has sufficiently abated.

Now here we seem to find want of social structure and want of law going together as cause and effect. The "friends" of whom we hear need to be organized into a police force. If we now turn to totemic society, with its elaborate clan-system, it is quite another story. Blood-revenge ranks amongst the foremost of the clansman's social obligations. Over the whole world it stands out by itself as the type of all that law means for the savage. Within the clan, indeed, the maxim of blood for blood does not hold; though there may be another kind of punitive law put into force by the totemites against an erring brother, as, for instance, if they slay one of their number for disregarding the exogamic rule and consorting with a woman who is all-one-flesh with him. But, between clans of the same tribe, the system of blood-revenge requires strict reprisals, according to the principle that some one on the other side, though not necessarily the actual murderer, must die the death. This is known as the principle of collective responsibility; and one of the most interesting problems relating to the evolution of early law is to work out how individual responsibility gradually develops out of collective, until at length,

even as each man does, so likewise he suffers.

The collective method of settling one's grievances is natural enough, when men are united into groups bound together by the closest of sentimental ties, and on the other hand there is no central and impartial authority to arbitrate between the parties. One of our crew has been killed by one of your crew. So a stand-up fight takes place. Of course we should like to get at the right man if we could; but, failing that, we are out to kill some one in return, just to teach your crew a lesson. Comparatively early in the day. however, it strikes the savage mind that there are degrees of responsibility. For instance, some one has to call the avenging party together, and to lead it. He will tend to be a real blood-relation, son, father, or brother. Thus he stands out as champion, whilst the rest are in the position of mere seconds. Correspondingly, the other side will tend to thrust forward the actual offender into the office of counter-champion. There is direct evidence to show that, amongst Australians, Eskimo, and so on, whole groups at one time met in battle, but later on were represented by chosen individuals, in the persons of those who were principals in the affair. Thus we arrive at the duel. The transition is seen in

such a custom as that of the Port Lincoln black-fellows. The brother of the murdered man must engage the murderer; but any one on either side who might care to join in the fray was at liberty to do so. Hence it is but a step to the formal duel, as found, for instance, amongst the Apaches of North America.

Now the legal duel is an advance on the collective bear-fight, if only because it brings home to the individual perpetrator of the crime that he will have to answer for it. Cranz, the great authority on the Eskimo of Greenland, naïvely remarks that a Greenlander dare not murder or otherwise wrong another, since it might possibly cost him the life of his best friend. Did the Greenlander know that it would probably cost him his own life, his sense of responsibility, we may surmise, might actually be quickened. On the other hand, duelling is not a satisfactory way of redressing the balance, since it merely gives the powerful bully an opportunity of adding a second murder to the first. Hence the ordeal marks an advance in legal evolution. A good many Australian peoples, for example, have reached the stage of requiring the murderer to submit to a shower of spears or boomerangs at the hands of the aggrieved group, on the mutual understanding that the blood-revenge ends here.

Luckily, however, for the murderer, it often takes time to bring him to book; and angry passions are apt in the meanwhile to subside. The ruder savages are not so bloodthirsty as we are apt to imagine. War has evolved like everything else; and with it has evolved the man who likes fighting for its own sake. So, in place of a life for a life, compensation—"pacation," as it is technically termed—comes to be recognized as a reasonable quid pro quo. Constantly we find custom at the half-way stage. If the murderer is caught soon, he is killed; but if he can stave off the day of justice, he escapes with a fine. When private property has developed, the system of blood-fines becomes most elaborate. Amongst the Iroquois the manslayer must redeem himself from death by means of no less than sixty presents to the injured kin; one to draw the axe out of the wound, a second to wipe the blood away, a third to restore peace to the land, and so forth. According to the collective principle, the clansmen on one side share the price of atonement, and on the other side must tax themselves in order to make it up. Shares are on a scale proportionate to degrees of relationship. Or, again, further nice calculations are required, if it is sought to adjust the gross amount of the payment to the degree of guilt. Hence it is not surprising that, when

a more or less barbarous people, such as the Anglo-Saxons, came to require a written law, it should be almost entirely taken up by regulations about blood-fines, that had become too complicated for the people any longer to keep in their heads.

So far we have been considering the law of blood-revenge as purely an affair between the clans concerned; the rest of the tribal public keeping aloof, very much in the style of the Andamanese bystanders who retire into the jungle when there is a prospect of a row. But with the development of a central authority, whether in the shape of the rule of many or of one, the public control of the bloodfeud begins to assert itself; for the good reason that endless vendetta is a dissolving force, which the larger and more stable type of society cannot afford to tolerate if it is to survive. The following are a few instances illustrative of the transition from private to public jurisdiction. In North America, Africa, and elsewhere, we find the chief or chiefs pronouncing sentence, but the clan or family left to carry it out as best they can. Again, the kin may be entrusted with the function of punishment, but obliged to carry it out in the way prescribed by the authorities; as, for instance, in Abyssinia, where the nearest relation executes the manslaver in the presence of the king, using exactly the same kind of weapon as that with which the murder was committed. Or the right of the kin to punish dwindles to a mere form. Thus in Afghanistan the elders make a show of handing over the criminal to his accusers, who must, however, comply strictly with the wishes of the assembly; whilst in Samoa the offender was bound and deposited before the family "as if to signify that he lay at their mercy," and the chief saw to the rest. Finally, the state, in the person of its executive officers, both convicts and executes.

When the state is represented by a single ruler, crime tends to become an offence against "the king's peace"—or, in the language of Roman law, against his "majesty." Henceforward, the easy-going system of getting off with a fine is at an end, and murder is punished with the utmost sternness. In such a state as Dahomey, in the old days of its independence, there may have been a good deal of barbarity displayed in the administration of justice, but at any rate human life was no less effectively protected by the law than it was, say, in mediæval Europe.

The evolution of the punishment of murder affords the typical instance of the develop-

ment of a legal sanction in primitive society. Other forms, however, of the forcible repression of wrong-doing deserve a more or less passing notice.

Adultery is, even amongst the ruder peoples. a transgression that is reckoned only a degree less grave than manslaughter; especially as manslaughter is a usual consequence of it, quarrels about women constituting one of the chief sources of trouble in the savage world. With a single interesting exception, the stages in the development of the law against adultery are exactly the same as in the case already examined. Whole kins fight about it. Then duelling is substituted. Then duelling gives way to the ordeal. Then, after the penalty has long wavered between death and a fine, fines become the rule, so long as the kins are allowed to settle the matter. If, however, the community comes to take cognizance of the offence, severer measures ensue. The one noticeable difference in the two developments is the following. Whereas murder is an offence against the chief's "majesty," and as such a criminal offence, adultery, like theft, with which primitive law is wont to associate it as an offence against property, tends to remain a purely civil affair. Kafir law, for example, according to Maclean, draws this distinction very clearly.

It remains to add as regards adultery that, so far, we have only been considering the punishment that falls on the guilty man. The guilty woman's fate is a matter relating to a distinct department of primitive law. Family jurisdiction, as we find it, for instance, in an advanced community such as ancient Rome, meant the right of the pater familias, the head of the house, to subject his familia, or household, which included his wife, his children (up to a certain age), and his slaves, to such domestic discipline as he saw fit. Such family jurisdiction was more or less completely independent of state jurisdiction; and, indeed, has remained so in Europe until comparatively recent times.

What light, then, does the study of primitive society throw on the first beginnings of family law as administered by the house-father? To answer this question at all adequately would involve the writing of many pages on the evolution of the family. For our present purpose, all turns on the distinction between the matripotestal and the patripotestal family. If the man and the woman were left to fight it out alone, the latter, despite the "shrewish sanction" that she possesses in her tongue, must inevitably bow to the principle that might is right. But, as long as marriage is matrilocal—that is to say, allows the wife to

remain at home amongst male defenders of her own clan-she can safely lord it over her stranger husband; and there can scarcely be adultery on her part, since she can always obtain divorce by simply saving, Go! Things grow more complicated when the wife lives amongst her husband's people, and, nevertheless. the system of counting descent favours her side of the family and not his. Does the mere fact that descent is matrilineal tend to imply on the whole that the mother's kin take a more active interest in her, and are more effective in protecting her from hurt, whether undeserved or deserved? It is problem to settle. Dr. Steinmetz, however, in his important work on The Evolution of Punishment (in German), seeks to show that under mother-right, in all its forms taken together, the adulteress is more likely to escape with a light penalty, or with none at all, than under father-right. Whatever be the value of the statistical method that he employs, at any rate it makes out the death penalty to be inflicted in only a third of his cases under the former system, but in about half under the latter.

We must be content with a mere glance at other types of wrong-doing which, whilst sooner or later recognized by the law of the community, affect its members in their individual capacity. Theft and slander are cases in point.

Amongst the ruder savages there cannot be much stealing, because there is next to nothing to steal. Nevertheless, groups are apt to quarrel over hunting and fishing claims; whilst the division of the spoils of the chase may give rise to disputes, which call for the interposition of leading men. We even occasionally find amongst Australians the formal duel employed to decide cases of the violation of property-rights. Not, however, until the arts of life have advanced, and wealth has created the two classes of "haves" and "havenots," does theft become an offence of the first magnitude, which the central authority punishes with corresponding severity.

As regards slander, though it might seem a slight matter, it must be remembered that the savage cannot stand up for a moment against an adverse public opinion; so that to rob him of his good name is to take away all that makes life worth living. To shout out, Longnose! Sunken-eyes! or Skin-and-bone! usually leads to a fight in Andamanese circles, as Mr. Man informs us. Nor, again, is it conducive to peace in Australian society to sing as follows about the staying-powers of a fellow-tribesman temporarily overtaken by

European liquor: "Spirit like emu—as a whirlwind—pursues—lays violent hold on travelling—uncle of mine (this being particularly derisive)—tired out with fatigue—throws himself down helpless." Amongst more advanced peoples, therefore, slander and abuse are sternly checked. They constitute a ground for a civil action in Kafir law; whilst we even hear of an African tribe, the Ba-Ngindo, who rejoice in the special institution of a peace-maker, whose business is to compose troubles arising from this vexatious source.

Let us now turn to another class of offences, such as, from the first, are regarded as so prejudicial to the public interest that the community as a whole must forcibly put them down.

Cases of what may be termed military discipline fall under this head. Even when the functions of the commander are undeveloped, and war is still "an affair of armed mobs," shirking—a form of crime which, to do justice to primitive society, is rare—is promptly and effectively resented by the host. Amongst American tribes the coward's arms are taken away from him; he is made to eat with the dogs; or perhaps a shower of arrows causes him to "run the gauntlet." The

traitor, on the other hand, is inevitably slain without mercy-tied to a tree and shot, or, it may be, literally hacked to pieces. Naturally, with the evolution of war, these spontaneous outbursts of wrath and disgust give way to a more formal system of penalties. To trace out this development fully, however, would entail a lengthy disquisition on the growth of kingship in one of its most important aspects. If constant fighting turns the tribe into something like a standing army, the position of war-lord, as, for instance, amongst the Zulus, is bound to become both permanent and of all-embracing authority. There is, however, another side to the history of kingship, as the following considerations will help to make clear.

Public safety is construed by the ruder type of man not so much in terms of freedom from physical danger—unless such a danger, the onset of another tribe, for instance, is actually imminent—as in terms of freedom from spiritual, or mystic, danger. The fear of ill-luck, in other words, is the bogy that haunts him night and day. Hence his life is enmeshed, as Dr. Frazer puts it, in a network of taboos. A taboo is anything that one must not do lest ill-luck befall. And ill-luck is catching, like an infectious disease. If my next-door neighbour breaks a taboo,

and brings down a visitation on himself. depend upon it some of its unpleasant consequences will be passed on to me and mine. Hence, if some one has committed an act that is not merely a crime but a sin, it is every one's concern to wipe out that sin; which is usually done by wiping out the sinner. Mobbish feeling always inclines to violence. In the mob, as a French psychologist has said, ideas neutralize each other, but emotions aggrandize each other. Now war-feeling is a mobbish experience that, I daresay, some of my readers have tasted: and we have seen how it leads the unorganized levy of a savage tribe to make short work of the coward and traitor. But war-fever is a mild variety of mobbish experience as compared with panic in any form, and with superstitious panic most of all. Being attacked in the dark, as it were, causes the strongest to lose their heads.

Hence it is not hard to understand how it comes about that the violator of a taboo is the central object of communal vengeance in primitive society. The most striking instance of such a taboo-breaker is the man or woman who disregards the prohibition against marriage within the kin—in other words, violates the law of exogamy. To be thus guilty of incest is to incite in the community at large a horror which, venting itself in what Bagehot

calls a "wild spasm of wild justice," involves certain death for the offender. To interfere with a grave, to pry into forbidden mysteries, to eat forbidden meats, and so on, are further examples of transgressions liable to be thus punished.

Falling under the same general category of sin, though distinct from the violation of taboo, is witchcraft. This consists in trafficking, or at any rate in being supposed to traffic, with powers of evil for sinister and anti-social ends. We have only to remember how England, in the seventeenth century, could work itself up into a frenzy on this account to realize how, in an African society even of the better sort, the "smelling-out" and destroying of a witch may easily become a general panacea for quieting the public nerves.

When crimes and sins, affairs of state and affairs of church thus overlap and commingle in primitive jurisprudence, it is no wonder if the functions of those who administer the law should tend to display a similar fusion of aspects. The chief, or king, has a "divine right," and is himself in one or another sense divine, even whilst he takes the lead in regard to all such matters as are primarily secular. The earliest written codes, such as the Mosaic Books of the Law, with their strange medley of injunctions concerning things profane and sacred, accurately reflect the politico-religious character of all primitive authority.

Indeed, it is only by an effort of abstraction that the present chapter has been confined to the subject of law, as distinguished from the subject of the following chapter, namely, religion. Any crime, as notably murder, and even under certain circumstances theft, is apt to be viewed by the ruder peoples either as a violation of taboo, or as some closely related form of sin. Nay, within the limits of the clan, legal punishment can scarcely be said to be in theory possible; the sacredness of the blood-tie lending to any chastisement that may be inflicted on an erring kinsman the purely religious complexion of a sacrifice, an act of excommunication, a penance, or what not. Thus almost insensibly we are led on to the subject of religion from the study of the legal sanction; this very term "sanction," which is derived from Roman law, pointing in the same direction, since it originally stood for the curse which was appended in order to secure the inviolability of a legal enactment.

## CHAPTER VIII

## RELIGION

"How can there be a History of Religions?" once objected a French senator. "For either one believes in a religion, and then everything in it appears natural; or one does not believe in it, and then everything in it appears absurd!"

This was said some thirty years ago, when it was a question of founding the now famous chair of the General History of Religions at the Collège de France. At that time, such chairs were almost unheard of. Now-a-days, the more important universities of the world, to reckon them alone, can show at least thirty.

What is the significance of this change? It means that the parochial view of religion is out of date. The religious man has to be a man of the world, a man of the wider world, an anthropologist. He has to recognize that there is a "soul of truth" in other religions besides his own.

It will be replied—and I fully realize the force of the objection—that history, and therefore anthropology, has nothing to do with truth or falsehood—in a word, with value.

In strict theory, this is so. Its business is to describe and generalize fact; and religion from first to last might be pure illusion or even delusion, and it would be fact none the less on that account.

At the same time, being men, we all find it hard, nay impossible, to study mankind impartially. When we say that we are going to play the historian, or the anthropologist, and to put aside for the time being all consideration of the moral of the story we seek to unfold, we are merely undertaking to be as fair all round as we can. Willy nilly, however, we are sure to colour our history, to the extent, at any rate, of taking a hopeful or a gloomy view of man's past achievements, as bearing on his present condition and his future prospects.

In the same way, then, I do not believe that we can help thinking to ourselves all the time, when we are tracing out the history of world-religion, either that there is "nothing in it" at all, or that there is "something in it," whatever form it assume, and whether it hold itself to be revealed (as it almost always does) or not. On the latter estimate of religion, however, it is still quite possible to judge that one form of religion is infinitely higher and better than another. Religion, regarded historically, is in evolution. The

best form of religion to which we can attain is inevitably the best for us; but, as a worse form preceded it, so a better form, we must allow and even desire, may follow. Now, frankly, I am one of those who take the more sympathetic view of historical religion; and I say so at once, in case my interpretation of the facts turn out to be coloured by this sanguine assumption.

Moreover, I think that we may easily exaggerate the differences in culture and, more especially, in religious insight and understanding that exist between the ruder peoples and ourselves. In view of our common hope, and our common want of knowledge, I would rather identify religion with a general striving of humanity than with the exclusive pretension of any one people or sect. Who knows, for instance, the final truth about what happens to the soul at death? I am quite ready to admit, indeed, that some of us can see a little farther into a brick wall than, say, Neanderthal man. Yet when I find facts that appear to prove that Neanderthal man buried his dead with ceremony, and to the best of his means equipped them for a future life, I openly confess that I would rather stretch out a hand across the ages and greet him as my brother and fellow-pilgrim than throw in my lot with the self-righteous

folk who seem to imagine this world and the next to have been created for their exclusive benefit.

Now the trouble with anthropologists is to find a working definition of religion on which they can agree. Christianity is religion, all would have to admit. Again, Mahomedanism is religion, for all anthropological purposes. But, when a naked savage "dances" his god -when the spoken part of the rite simply consists, as amongst the south-eastern Australians, in shouting "Daramulun! Daramulun!" (the god's name), so that we cannot be sure whether the dancers are indulging in a prayer or in an incantation—is that religion? Or, worse still, suppose that no sort of personal god can be discovered at the back of the performance—which consists, let us say, as amongst the central Australians, in solemnly rubbing a bull-roarer on the stomach, so that its mystic virtues may cause the man to become "good" and "glad" and "strong" (for that is his own way of describing the spiritual effects)—is that religion, in any sense that can link it historically with, say, the Christian type of religion?

No, say some, these low-class dealings with the unseen are magic, not religion. The rude folk in question do not go the right way about putting themselves into touch with the unseen. They try to put pressure on the unseen, to control it. They ought to conciliate it, by bowing to its will. Their methods may be earnest, but they are not propitiatory. There is too much "My will be done" about it all.

Unfortunately, two can play at this game of ex-parte definition. The more unsympathetic type of historian, relentlessly pursuing the clue afforded by this distinction between control and conciliation, professes himself able to discover plenty of magic even in the higher forms of religion. The rite as such—say, churchgoing as such—appears to be reckoned by some of the devout as not without a certain intrinsic efficacy. "Very well," says this school, "then a good deal of average Christianity is magic."

My own view, then, is that this distinction will only lead us into trouble. And, to my mind, it adds to the confusion if it be further laid down, as some would do, that this sort of dealing with the unseen which, on the face of it, and according to our notions, seems rather mechanical (being, as it were, an effort to get a hold on some hidden force) is so far from being akin to religion that its true affinity is with natural science. The natural science of to-day, I quite admit, has in part evolved out of experiments with the occult;

just as law, fine art, and almost every other one of our higher interests have likewise done. But just so long and so far as it was occult science. I would maintain, it was not natural science at all, but, as it were, rather supernatural science Besides, much of our natural science has grown up out of straightforward attempts to carry out mechanical work on industrial lines—to smelt iron, let us say: but since then, as now, there were numerous trade-secrets, an atmosphere of mystery was apt to surround the undertaking, which helped to give it the air of a trafficking with the uncanny. But because science then, as even now sometimes, was thought by the ignorant to be somehow closely associated with all the powers of evil, it does not follow that then or now the true affinity of science must be with the devil.

Magic and religion, according to the view I would support, belong to the same department of human experience—one of the two great departments, the two worlds, one might almost call them, into which human experience, throughout its whole history, has been divided. Together they belong to the supernormal world, the x-region of experience, the region of mental twilight.

\Magic I take to include all bad ways, and religion all good ways, of dealing with the

supernormal—bad and good, of course, not as we may happen to judge them, but as the society concerned judges them. Sometimes, indeed, the people themselves hardly know where to draw the line between the two, and, in that case, the anthropologist cannot well do it for them. But every primitive society thinks witchcraft bad. Witchcraft consists in leaguing oneself with supernormal powers of evil in order to effect selfish and anti-social ends. Witchcraft, then, is genuine magic—black magic, of the devil's colour. On the other hand, every primitive society also distinguishes certain salutary ways of dealing with supernormal powers. All these ways taken together constitute religion. For the rest, there will always be a mass of more or less evaporated beliefs, going with practices that have more or less lost their hold on the community. These belong to the folk-lore which every people has. Under this or some closely related head must also be set down the mass of mere wonder-tales, due to the play of fancy, and without direct bearing on the serious pursuits of life.

The world to which neither magic nor religion belongs, but to which physical science, the knowledge of how to deal mechanically with material things, does belong wholly, is the workaday world, the region of normal,

commonplace, calculable happenings. With our telescopes and microscopes we see farther and deeper into things than does the savage. Yet the savage has excellent eyes. What he sees he sees. Consequently, we must duly allow for the fact that there is for him, as well as for us, a "natural," that is to say, normal and workaday world; even though it be far narrower in extent than ours. The savage is not perpetually spook-haunted. On the contrary, when he is engaged on the daily round, and all is going well, he is as careless and happy as a child.

But savage life has few safeguards. Crisis is a frequent, if intermittent, element in it. Hunger, sickness and war are examples of crisis. Birth and death are crises. Marriage is usually regarded by humanity as a crisis. So is initiation—the turning-point in one's career, when one steps out into the world of men. Now what, in terms of mind, does crisis mean? It means that one is at one's wits' end; that the ordinary and expected has been replaced by the extraordinary and unexpected; that we are projected into the world of the unknown. And in that world of the unknown we must miserably abide until, somehow, confidence is restored.

\Psychologically regarded, then, the function of religion is to restore men's confidence when

it is shaken by crisis. Men do not seek crisis; they would always run away from it, if they could. Crisis seeks them; and, whereas the feebler folk are ready to succumb, the bolder spirits face it. Religion is the facing of the unknown. It is the courage in it that brings comfort.<sup>1</sup>

We must go on, however, to consider religion sociologically. A religion is the effort to face crisis, so far as that effort is organized by society in some particular way. A religion is congregational—that is to say, serves the ends of a number of persons simultaneously. It is traditional—that is to say, has served the ends of successive generations of persons. Therefore inevitably it has standardized a method. It involves a routine, a ritual. Also it involves some sort of conventional doctrine, which is, as it were, the inner side of the ritual—its lining.

Now in what follows I shall insist, in the first instance, on this sociological side of religion. For anthropological purposes it is the sounder plan. We must altogether eschew that "Robinson Crusoe method" which consists in reconstructing the creed of a solitary savage,

<sup>&</sup>lt;sup>1</sup> The courage involved in all live religion normally coexists with a certain modesty or humility. I have tried to work out this point elsewhere in a short study entitled The Birth of Humility (in The Threshold of Religion, 1914).

who is supposed to evolve his religion out of his inner consciousness: "The mountain frowns, therefore it is alive"; "I move about in my dreams whilst my body lies still, therefore I have a soul," and so on. No doubt somebody had to think these things, for they are thoughts. But he did not think them, at any rate did not think them out, alone. Men thought them out together; nay, whole ages of living and thinking together have gone to make them what they are. So a social method is needed to explain them.

The religion of a savage is part of his custom; nay, rather, it is his whole custom so far as it appears sacred—so far as it coerces him by way of his imagination. Between him and the unknown stands nothing but his custom. It is his all-in-all, his stand-by, his faith and his hope. Being thus the sole source of his confidence, his custom, so far as his imagination plays about it, becomes his "luck." We may say that any and every custom, in so far as it is regarded as lucky, is a religious rite.

Hence the conservatism inherent in religion. "Nothing," says Robertson Smith, "appeals so strongly as religion to the conservative instincts." "The history of religion," once exclaimed Dr. Frazer, "is a long attempt to reconcile old custom with new reason, to find a sound theory for absurd practice." At first

sight one is apt to see nothing but the absurdities in savage custom and religion. After all, these are what strike us most, being the curiosity-hunters that we all are. But savage custom and religion must be taken as a whole, the bad side with the good. Of course, if we have to do with a primitive society on the down-grade—and very few that have been "civilizaded," as John Stuart Mill terms it, at the hands of the white man are not on the down-grade -its disorganized and debased custom no longer serves a vital function. But a healthy society is bound, in a wholesale way, to have a healthy custom. Though it may go about the business in a queer and roundabout fashion, it must hit off the general requirements of the situation. Therefore I shall not waste time, as I might easily do, in piling up instances of outlandish "superstitions," whether horrible and disgusting, from our more advanced point of view, or merely droll and silly. On the contrary, I would rather make it my working assumption that, with all its apparent drawbacks, the religion of a human society, if the latter be a going concern, is always something to be respected.

In considering, however, the relation of religion to custom, we are met by the apparent difficulty that, whereas custom implies "Do,"

the prevailing note of primitive religion would seem rather to consist in "Do not." But there is really no antagonism between them on this account. As the old Greek proverb has it, "There is only one way of going right, but there are infinite ways of going wrong." Hence, a nice observance of custom of itself involves endless taboos. Since a given line of conduct is lucky, then this or that alternative course of behaviour must be unlucky. There is just this difference between positive customs or rites, which cause something to be done, and negative customs or rites, which cause something to be left undone, that the latter appeal more exclusively to the imagination for their sanction, and are therefore more conspicuously and directly a part of religion. "Why should I do this?" is answered well-nigh sufficiently by saying, "Because it is the custom, because it is right." It seems hardly necessary to add, "Because it will bring luck." But "Why should I not do something else instead?" meets, in the primitive society, with the invariable answer, "Because, if you do, something awful will happen to us all." What precise shape the ill-luck will take need not be specified. The suggestion rather gains than loses by the indefiniteness of its appeal to the imagination.

To understand more clearly the difference between negative and positive types of custom as associated with religion, let us examine in some detail an example of each. It will be well to select our cases from amongst those that show the custom and the religion to be quite inseparable—to be, in short, but two aspects of one and the same fact. Now nothing could be more commonplace and secular a custom than that of providing for one's dinner. Yet for primitive society this custom tends to be likewise a rite—a rite which may, however, be mainly negative and precautionary, or mainly positive and practical in character, as we shall now see.

The Todas, so well described by Dr. Rivers, are a small community, less than a thousand all told, who have retired out of the stress of the world into the fastnesses of the Nilgiri Hills, in southern India, where they spend a safe but decidedly listless life. They are in a backwater, and are likely to remain there. At any rate, their religion is not such as to make them more enterprising. Gods they may be said to have none. The bare names of certain deities of the hill-tops are retained, but whether these were once the honoured gods of the Todas or, as some think, those of a former race, certain it is that there is more shadow than substance about them now. The real

religion of the people centres round a dairyritual. From a practical and economic point of view, the work of the dairy consists in converting the milk of their buffaloes into the butter and buttermilk which constitute their staple diet. From a religious point of view, it consists in converting something they dare not eat into something they can eat. •

Many, though not all, of their buffaloes are sacred, and their milk may not be drunk. The reason why it may not be drunk anthropologists may cast about to discover, but the Todas themselves do not know. All that they know, and are concerned to know, is that things would somehow all go wrong, if any one were foolish enough to commit such a sin. So in the Toda temple, which is a dairy, the Toda priest, who is the dairyman, sets about rendering the sacred products harmless. dairy has two compartments-one sacred, the other profane. In the first are stored the sacred vessels, into which the milk is placed when it comes from the buffaloes, and in which it is turned into butter and buttermilk with the help of some of the previous brew, this having meanwhile been put by in an especially sacred vessel. In the second compartment are profane vessels, destined to receive the butter and buttermilk, after they have been carefully transferred from the sacred vessels with the help of an intermediary vessel, which stands exactly on the line between the two compartments. This transference, being carried out to the accompaniment of all sorts of reverential gestures and utterances, secures such a profanation of the sacred substance as is without the evil consequences that would otherwise be entailed. Thus the ritual is essentially precautionary. A taboo is the hinge of the whole affair.

And the tendency of such a negative type of religion is to pile precautions on precautions. Thus the dairyman, in order to be equal to his sacred office, must observe taboos without end. He must be celibate. He must avoid all contact with the dead. He is limited to certain kinds of food: which, moreover, must be prepared in a certain way, and consumed in a certain place. His drink, again, is a special milk, which must be poured out with prescribed formulas. He is inaccessible to ordinary folk save on certain days and in certain ways, their mode of approach, their salutations, his greeting in reply, being all regulated with the utmost nicety. He can only wear a special garb. He must never cut his hair. His nails must be suffered to grow long. And so on and so forth. Such disabilities, indeed, are wont to circumscribe the life of all sacred persons, and can be matched from every part of the world. But they may fairly be cited here, as helping to fill in the picture of what I have called the precautionary or negative type of religious ritual.

Further, there is something rotten in the state of Toda religion. The dairymen struck Dr. Rivers as very slovenly in the performance of their duties, as well as vague and inaccurate in their accounts of what ought to be done. Indeed, it was hard to find persons willing to undertake the office. Ritual duties involving uncomfortable taboos were apt to be thrust on youngsters. The youngsters, being youngsters, would probably violate the taboos; but anyway that was their look-out. From evasions to fictions is but a step. Hence when an unclean person approached the dairyman, the latter would simply pretend not to see him. Or the rule that he must not enter a hut, if women were within, would be circumvented by simply removing from the dwelling the three emblems of womanhood, the pounder, the sieve, and the sweeper; whereupon his "face was saved." Now wherefore all this lack of earnestness? Dr. Rivers thinks that too much ritual was the reason. I agree; but would venture to add, "too much negative ritual." A religion that is all dodging must produce a sneaking kind of worshipper.

Now let us turn to another type of primitive

religion that is equally identified with the foodquest, but allied to its positive and active functions, which it seeks to help out. Messrs. Spencer and Gillen have given us a most minute account of certain ceremonies of the Arunta, a people of central Australia. These ceremonies they have named Intichiuma, and the name will probably stick, though there is reason to believe that the native word for them is really something different. Their purpose is to make the food-animals and food-plants multiply and prosper. Each animal or plant is attended to by the group that has it for a totem. (Totemism amongst this very remarkable people has nothing to do either with exogamy or with lineage; but that is a subject into which it is impossible to go here.)
The rites vary considerably from totem to totem, but a typical case or two may be cited.

The witchetty-grub men, for instance, want the grubs to multiply, that there may be plenty for their fellows to eat. So they wend their way along a certain path which tradition declares to have been traversed by the great leader of the witchetty-grubs of the days of long ago. (These were grubs transformed into men, who became by reincarnation ancestors of the present totemites.) The path brings them to a place in the hills where there

is a big stone surrounded by many small stones. The big stone is the adult animal, the little stones are its eggs. So first they tap the big stone, chanting an invitation to it to lay eggs. Then the master of the ceremonies rubs the stomach of each totemite with the little stones, and says, "You have eaten much food."

Or, again, the Kangaroo men repair to a place called Undiara. It is a picturesque spot. By the side of a water-hole that is sheltered by a tall gum-tree rises a curiously gnarled and weather-beaten face of quartzite rock. About twenty feet from the base a ledge juts out. When the totemites hold their ceremony, they repair to this ledge. For here in the days of long ago the ancestors who are now reincarnated in them cooked and ate kangaroo food; and here, moreover, the kangaroo animals of that time deposited their spirit-parts. First the face of the rock below the ledge is decorated with long stripes of red ochre and white gypsum, to represent the red fur and white bones of the kangaroo. It is, in fact, one of those rock-paintings such as the palæolithic men of Europe made in their caves. Then a number of men, say, seven or eight, mount upon the ledge, and, whilst the rest sing solemn chants about the prospective increase of the kangaroos, these

men open veins in their arms, so that the blood flows down freely upon the ceremonial stone. This is the first part of the rite. The second part is no less interesting. After the bloodletting, they hunt until they kill a kangaroo. Thereupon the old men of the totem eat a little of the meat; then they smear some of the fat on the bodies of all the party; finally, they divide the flesh amongst them. Afterwards, the totemites paint their bodies with stripes in imitation of the design upon the rock. A second hunt, followed by a second sacramental meal, concludes the whole ceremony. That their meal is sacramental, a sort of communion service, is proved by the fact that henceforth in an ordinary way they allow themselves to partake of kangaroo meat at most but very sparingly, and of certain portions of the flesh not at all.

One more example of these rites may be cited, in order to bring out the earnestness of this type of religion, which is concerned with doing, instead of mere not-doing. There is none of the Toda perfunctoriness here. It will be enough to glance at the commencement of the ritual of the honey-ant totemites. The master of the ceremonies places his hand as if he were shading his eyes, and gazes intently in the direction of the sacred place to which they are about to repair. As he

does so, the rest kneel, forming a straight line behind him. In this position they remain for some time, whilst the leader chants in a subdued tone. Then all stand up. The company must now start. The leader, who has fallen to the rear, that he may marshal the column in perfect line, gives the signal. Then they move off in single file, taking a direct course to the holy ground, marching in perfect silence, and with measured step, as if something of the profoundest import were about to take place.

I make no apology for describing these proceedings at some length. It is necessary to my argument to convey the impression that the essentials of religion are present in these apparently godless observances of the ruder peoples. They arise directly out of custom—in this case the hunting custom. Their immediate design is to provide these people with their daily bread. Yet their appeal to the imagination—which in religion, as in science, art, and philosophy, is the impulse that presides over all progress, all creative evolution—is such that the food-quest is charged with new and deeper meaning. Not bread alone, but something even more sustaining to the life of man, is suggested by these tangled and obscure solemnities. They are penetrated by quickenings of sacrifice, prayer,

and communion. They bring to bear on the need of the hour all the promise of that miraculous past, which not only cradled the race, but still yields it the stock of reincarnated soul-force that enables it to survive. If, then, these rites are part and parcel of mere magic, most, or all, of what the world knows as religion must be mere magic. But it is better for anthropology to call things by the names that they are known by in the world of men—that is, in the wider world, not in some corner or coterie of it.

In order to bring out more fully the second point that I have been trying to make, namely, the close interdependence between religion and custom in primitive society, let me be allowed to quote one more example of the ritual of a rude people. And again let us resort to native Australia, though this time to the south-eastern corner of it; since in Australia we have a cultural development on the whole very low, having been as it were arrested through isolation, yet one that turns out to be not incompatible with high religion in the making.

Initiation in native Australia is the equivalent of what is known amongst ourselves as the higher education. The only difference is that, with them, every one who is not judged utterly unfit is duly initiated; whereas, with us, the higher education is offered to some who are unfit, whilst many who are fit never have the luck to get it. The initiation-custom is intended to tide the boys over the difficult time of puberty, and turn them into responsible men. The whole of the adult males assist in the ceremonies. Special men, however, are told off to tutor the youth—a lengthy business, since it entails a retirement, perhaps for six months, into the bush with their charges; who are there taught the tribal traditions, and are generally admonished, sometimes forcibly, for their good. Further, this is rather like a retirement into a monastery for the young men, seeing that during all the time they are strictly taboo, or in other words in a holy state that involves much fasting and mortification of the flesh. At last comes the time when their actual passage across the threshold of manhood has to be celebrated. The rites may be described in one word as impressive. Society wishes to set a stamp on their characters, and believes in stamping hard. Physically, then, the lads feel the force of society. A tooth is knocked out, they are tossed in the air to make them grow tall, and so on-rites that, whilst they may have separate occult ends in view, are completely at one in being highly unpleasant.

Spiritual means of education, however, are always more effective than physical, if designed and applied with sufficient wisdom. The bullroarer, of which something has been already said, furnishes the ceremonies with a background of awe. It fills the woods, that surround the secret spot where the rites are held. with the rise and fall of its weird music, suggestive of a mighty rushing wind, of spirits in the air. Not until the boys graduate as men do they learn how the sound is produced. Even when they do learn this, the mystery of the voice speaking through the chip of wood merely wings the imagination for loftier flights. Whatever else the high god of these mysteries, Daramulun, may be for these people—and undoubtedly all sorts of trains of confused thinking meet in the notion of him-he is at any rate the god of the bullroarer, who has put his voice into the sacred instrument. But Daramulun is likewise endowed with a human form; for they set up an image of him rudely shaped in wood, and round about it dance and shout his name. Daramulun instituted these rites, as well as all the other immemorial rites of the assembled tribe or tribes. So when over the heads of the boys, prostrated on the ground, are recited solemnly what Mr. Lang calls "the ten commandments," that bid them honour the elders, respect the marriage law, and so on, there looms up before their minds the figure of the ultimate law-giver; whilst his unearthly voice becomes for them the voice of the law. Thus is custom exalted, and its coercive force amplified, by the suggestion of a power—in this case a definitely personal power—that "makes for righteousness," and, whilst beneficent, is full of terror for offenders.

And now it may seem high time to pass on from the sociological and external view that has hitherto been taken of primitive religion to a psychological view of it—one that should endeavour to disclose the hidden motives, the spiritual sources, of the beliefs that underlie and sustain the customary practices. precisely at this point the anthropological treatment of religion is apt to prove unsatisfactory. History can record that such and such is done with far more certainty than that such and such a state of mind accompanies and inspires the doing. Besides, the savage is no authority on the why and wherefore of his customs. "However else would a reasonable being think of acting?" is his sufficient reason, as we have already seen. Not but what the higher minds amongst savages reflect in their own way upon the meaning of their customs and rites. But most of this reflection is no more than an elaborate "justification after the event." The mind invents what Mr. Kipling would call a "Just-so story" to account for something already there. How it might have come about, not how it did come about, is all that the professed explanation amounts to. And when it comes to choosing amongst mere possibilities, the anthropologist, instead of consulting the savage, may just as well endeavour to do it for himself.

Now anthropological theories of the origin of religion seem to me to go wrong mainly because they seek to simplify too much. Having got down to what they take to be a root-idea, they straightway proclaim it the root-idea. I believe that religion has just as few, or as many, roots as human life and mind.

The theory of the origin of religion that may be said to hold the field, because it is the view of the greatest of living anthropologists, is Sir E. Tylor's theory of animism. The term animism is derived from the Latin anima, which—like the corresponding word spiritus, whence our "spirit"—signifies the breath, and hence the soul, which primitive folk tend to identify with the breath. Sir E. Tylor's theory of animism, then, as set forth in his great work, *Primitive Culture*, is that "the belief in spiritual beings" will do as a

definition of religion taken at its least; which for him means the same thing as taken at its earliest. Now what is a "spiritual being"? Clearly everything turns on that. Sir E. Tylor's general treatment of the subject seems to lay most of the emphasis on the phantasm. A phantasm (as the etymology of the word shows) is essentially an appearance. In a dream or hallucination one sees figures, more or less dim, but still having "vaporous materiality." So, too, the shadow is something without body that one can see; though the breath, except on a frosty day, shows its subtle but yet sensible nature rather by being felt than by being seen. Now there can be no doubt that the phantasm plays a considerable part in primitive religion (as well as in those fancies of the primitive mind that have never found their way into religion, at all events into religion as identified with organized cult). Savages see ghosts, though probably not more frequently than we do; they have vivid dreams, and are much impressed by their dream-experiences; and so on. Besides, the phantasm forms a very convenient half-way house between the seen and the unseen: and there can be no doubt that the savage often says breath, shadow, and so forth, when he is trying to think and mean something immaterial altogether.

But animism would seem sometimes to be used by Sir E. Tylor in a wider sense, namely, as "a doctrine of universal vitality." In dealing with the myths of the ruder peoples, as, for example, those about the sun, moon, and stars, he shows how "a general animation of nature" is implied. The primitive man reads himself into these things, which, according to our science, are without life or personality. He thinks that they have a different kind of body, but the same kind of feelings and motives. But this is not necessarily to think that they are capable of giving off a phantasm, as a man does when his soul temporarily leaves him, or when after death his soul becomes a ghost. There need be nothing ghost-like about the sun, whether it is imagined as a shining orb, or as a shining being of human shape to whom the orb belongs. There is not anything in the least phantasmal about the Greek god Apollo. I think, then, that we had better distinguish this wider sense of animism by a different name, calling it "animatism," since that will serve at once to disconnect and to connect the two conceptions.

I am not sure, however, how far we ought to press this "doctrine of universal vitality." Does a savage, for instance, when he is hammering at a piece of flint think of it as other than a "thing," any more than we should? I doubt it. He may say "Confound you!" if it suddenly snaps in two, just as we might do. But though the language may seem to imply a "you," he would mean, I believe, to impute to the flint just as much, or as little, of personality as we should mean to do when using similar language. In other words, I believe that, within the world of his ordinary worka-day experience, he recognizes both things and persons; without giving a thought, in either case, to the hidden principles that make them be what they are, and act as they do.

When, on the other hand, the thing, or the person, falls within the world of supernormal experience, when they strike the imagination as wonderful and wonder-working, then there is much more reason why he should seek to account to himself for the mystery in, or behind, the strange appearance. Howitt, who knew his Australian natives intimately, cites the following as "a good example of how the native mind works." To the black-fellow his club or his spear are part and parcel of his ordinary life. There is no "medicine," no "devil," in them. If they are to be made supernaturally potent, they must be specially charmed. But it is quite otherwise with his spear-thrower or his bull-roarer. The former for no obvious reason enables him to throw his spear extraordinarily far. (I have myself

seen an Australian spear, with the help of the spear-thrower, fly a hundred and fifty yards, and strike true and deep at the end of its flight.) The latter emits the noise of thunder, though a mere chip of wood on the end of a string. These, then, are in themselves "medicine." There is "virtue" in, or behind, them.

Is, then, to attribute "virtue" the same thing, necessarily, as to attribute vitality? Are the spear-thrower and the bull-roarer inevitably thought of as alive? Or are they, as a matter of course, endowed with soul or spirit? Or may there be also an impersonal kind of "virtue," "medicine," or whatever the wonder-working power in the wonder-working thing is to be called? Now there is evidence that the savage himself, in speaking about these matters, sometimes says power, sometimes vitality, sometimes spirit. But the simplest way of disposing of these questions is to remember that such fine distinctions as these, which theorists may seek to draw, do not appeal at all to the savage himself. For him the only fact that matters is that, whereas some things in the world are ordinary, and can be reckoned on, other things cannot be reckoned on, but are wonder-working.

Moreover, of wonder-working things, some are good and some are bad. To get all the

good kind of wonder-workers on to his side, so as to confound the bad kind—that is what his religion is there to do for him. "May blessings come, may mischiefs go!" is the import of his religious striving, whether anthropologists class it as spell or as prayer.

Now the function of religion, it has been assumed, is to restore confidence, when man is mazed, and out of his depth, fearful of the mysteries that obtrude on his life, vet compelled, if not exactly wishful, to face them and wrest from them whatever help is in them. This function religion fulfils by what may be described in one word as "suggestion." How the suggestion works psychologically-how, for instance, association of ideas, the so-called "sympathetic magic," predominates at the lower levels of religious experience—is a difficult and technical question which cannot be discussed here. Religion stands by when there is something to be done, and suggests that it can be done well and successfully: nay, that it is being so done. And, when the religion is of the effective sort, the believers respond to the suggestion, and put the thing through. As the Latin poet says, "they can because they think they can."

What, from the anthropological point of view, is the effective sort of religion, the sort that survives because, on the whole, those

whom it helps survive? It is dangerous to make sweeping generalizations, but there is at any rate a good deal to be said for classing the world's religions either as mechanical and ineffective, or as spiritual and effective. The mechanical kind offers its consolations in the shape of a set of implements. The "virtue" resides in certain rites and formularies. These. as we have seen, are especially liable to harden into mere mechanism when they are of the negative and precautionary type. spiritual kind of religion, on the other hand, which is especially associated with the positive and active functions of life, tends to read will and personality into the wonder-working powers that it summons to man's aid. The will and personality in the worshippers are in need not so much of implements as of more will and personality. They get this from a spiritual kind of religion; which in one way or another always suggests a society, a communion, as at once the means and the end of vital betterment.

To say that religion works by suggestion is only to say that it works through the imagination. There is good make-believe as well as bad; and one must necessarily imagine and make-believe in order to will. The more or less inarticulate and intuitional forces of the mind, however, need to be supplemented by

the power of articulate reasoning, if the will is to make good its twofold character of a faculty of ends that is likewise a faculty of the means to those ends. Suggestion, in short, must be purged by criticism before it can serve as the guide of the higher life. To bring this point out will be the object of the following chapter.

## CHAPTER IX

## MORALITY

SPACE is running out fast, and it is quite impossible to grapple with the details of so vast a subject as primitive morality. For these the reader must consult Dr. Westermarck's monumental treatise, The Origin and Development of the Moral Ideas, which brings together an immense quantity of facts, under a clear and comprehensive scheme of headings. He will discover, by the way, that, whereas customs differ immensely, the emotions, one may even say the sentiments, that form the raw material of morality are much the same everywhere.

Here it will be of most use to sketch the psychological groundwork of primitive morality, as contrasted with morality of the more advanced type. In pursuance of the plan hitherto followed, let us try to move yet another step on from the purely exterior view of human life towards our goal; which is to appreciate the true inwardness of human life—so far at least as this is matter for anthropology, which reaches no farther than the historic method can take it.

It is, of course, open to question whether either primitive or advanced morality is sufficiently of one piece to allow, as it were, a composite photograph to be framed of either. For our present purposes, however, this expedient is so serviceable as to be worth risking. Let us assume, then, that there are two main stages in the historical evolution of society, as considered from the standpoint of the psychology of conduct. I propose to term them the synnomic and the syntelic phases of society. "Synnomic" (from the Greek nomos, custom) means that customs are shared. "Syntelic" (from the Greek telos, end) means that ends are shared.

The synnomic phase is, from the psychological point of view, a kingdom of habit; the syntelic phase is a kingdom of reflection. The former is governed by a subconscious selection of its standards of good and bad; the latter by a conscious selection of its standards. It

remains to show very briefly how such a difference comes about.

The outstanding fact about the synnomic life of the ruder peoples is perhaps this—that there is hardly any privacy. Of course, many other drawbacks must be taken into account also--no wide-thrown communications, no analytic language, no writing, no books, and so on: but perhaps being in a crowd all the time is the worst drawback of all. For, as Disraeli says in Sybil, gregariousness is not association. Constant herding and huddling together hinders the development of personality. That independence of character which is the prime condition of syntelic society cannot mature, even though the germs be there. No one has a chance of withdrawing into his own soul. Therefore the individual does not experience that silent conversation with self which is reflection. Instead of turning inwards, he turns outwards. In short, he imitates.

But how, it may be objected, does evolution take place, if every one imitates every one else? Certainly, it looks at first sight like a vicious circle. Nevertheless, there is room for a certain progress, or at any rate for a certain process of change. To analyse its psychological springs would take us too long. If a phrase will do instead of an explanation, we

may sum them up, with the brilliant French psychologist Tarde, as "a cross-fertilization of imitations." We need not, however, go far to get an impression of how this process of change works. It is going on every day in our midst under the name of "change of fashion." When one purchases the latest thing in ties or straw hats, one is not aiming at a rational form of dress. If there is progress in this direction, it is subconscious. The underlying spiritual condition is not inaptly described by Dr. Lloyd Morgan as "a sheep-through-the-gapishness."

From a moral point of view, this lack of capacity for private judgment is equivalent to a want of moral freedom. We have seen how relatively external are the sanctions of savage life. This does not mean, of course, that there is no answering judgment in the mind of the individual when he follows his customs. He says, "It is the custom; therefore it is right." But this judgment can scarcely be said to proceed from a truly judging, that is to say, critical, self. The man watches his neighbours, taking his cue from them. His judgment is a judgment of sense. He does not look inwards to principle. A moral principle is a standard that can, by means of thought, be transferred from one sensible situation to another sensible situation.

The general law, and its application to the situation present now to the senses, are considered apart, before being put together. Consequently, a possible application, however strongly suggested by custom, fashion, the action of one's neighbours, one's own impulse or prejudice, or what not, can be resisted, if it appear on reflection not to be really suited to the circumstances. In short, in order to be rational and "put two and two together," one must be able to entertain two and two as distinct conceptions. Perceptions, on the contrary, can only be compared in the lump. Just as in the chapter on language we saw how man began by talking in holophrases, and only gradually attained to analytic, that is, separable, elements of speech, so in this chapter we have to note the strictly parallel development from confusion to distinction on the side of thought.

Savage morality, then, is not rational in the sense of analysed, but is, so to speak, impressionistic. We might, perhaps, describe it as the expression of a collective impression. It is best understood in the light of that branch of social psychology which usually goes by the name of "mob-psychology." Perhaps mob and mobbish are rather unfortunate terms. They are apt to make us think of the wilder explosions of collective feeling—

panics, blood-mania, dancing-epidemics, and so on. But, though a savage society is by no means a mob in the sense of a weltering mass of humanity that has for the time being lost its head, the psychological considerations applying to the latter apply also to the former, when due allowance has been made for the fact that savage society is organized on a permanent basis. The difference between the two comes, in short, to this, that the mob as represented in the savage society is a mob consisting of many successive generations of men. Its tradition constitutes, as it were, a prolonged and abiding impression, which its conduct thereupon expresses.

Savage thought, then, is not able, because it does not try, to break up custom into separate pieces. Rather it plays round the edges of custom; religion especially, with its suggestion of the general sacredness of custom, helping it to do so. There is found in primitive society plenty of vague speculation that seeks to justify the existing. But to take the machine to bits in order to put it together differently is out of the reach of a type of intelligence which, though competent to grapple with details, takes its principles for granted. When progress comes, it comes by stealth, through imitating the letter, but refusing to imitate the spirit; until by means

of legal fictions, ritual substitutions, and so on, the new takes the place of the old without any one noticing the fact.

Freedom, in the sense of intellectual freedom, may perhaps be said to have been born in one place and at one time-namely, in Greece in the fifth and fourth centuries B.C.1 Of course, minglings and clashings of peoples had prepared the way. Ideas begin to count as soon as they break away from their local context. But Greece, in teaching the world the meaning of intellectual freedom, paved a way towards that most comprehensive form of freedom which is termed moral. Moral freedom is the will to give out more than you take in; to repay with interest the cost of your social education. It is the will to take thought about the meaning and end of human life, and by so doing to assist in creative evolution.

## CHAPTER X

## MAN THE INDIVIDUAL

By way of epilogue, a word about individuality, as displayed amongst peoples of

<sup>1</sup> Political freedom, which is rather a different matter, is perhaps pre-eminently the discovery of England.

the ruder type, will not be out of place. There is a real danger lest the anthropologist should think that a scientific view of man is to be obtained by leaving out the human nature in him. This comes from the over-anxiety of evolutionary history to arrive at general principles. It is too ready to rule out the so-called "accident," forgetful of the fact that the whole theory of biological evolution may with some justice be described as "the happy accident theory." The man of high individuality, then, the exceptional man, the man of genius, be he man of thought, man of feeling, or man of action, is no accident that can be overlooked by history. On the contrary, he is in no small part the history-maker; and, as such, should be treated with due respect by the history-compiler. The "dry bones" of history, its statistical averages, and so on, are all very well in their way; but they correspond to the superficial truth that history repeats itself, rather than to the deeper truth that history is an evolution. Anthropology. then, should not disdain what might be termed the method of the historical novel. To study the plot without studying the characters will never make sense of the drama of human life.

It may seem a truism, but is perhaps worth recollecting at the start, that no man or woman

lacks individuality altogether, even if it cannot be regarded in a particular case as a high individuality. No one is a mere item That useful figment of the statistician has no real existence under the sun. We need to supplement the books of abstract theory with much sympathetic insight directed towards men and women in their concrete selfhood. Said a Vedda cave-dweller to Dr. Seligmann (it is the first instance I light on in the first book I happen to take up): "It is pleasant for us to feel the rain beating on our shoulders, and good to go out and dig yams, and come home wet, and see the fire burning in the cave, and sit round it." That sort of remark. to my mind, throws more light on the anthropology of cave-life than all the bones and stones that I have helped to dig out of our Mousterian caves in Jersey. As the stock phrase has it, it is, as far as it goes, a "human document." The individuality, in the sense of the intimate self-existence, of the speaker and his group-for, characteristically enough, he uses the first person plural—is disclosed sufficiently for our souls to get into touch. We are the nearer to appreciating human history from the inside.

Some of those students of mankind, therefore, who have been privileged to live amongst the ruder peoples, and to learn their language well, and really to be friends with some of them (which is hard, since friendship implies a certain sense of equality on both sides), should try their hands at anthropological biography. Anthropology, so far as it relates to savages, can never rise to the height of the most illuminating kind of history until this is done.

It ought not to be impossible for an intelligent white man to enter sympathetically into the mental outlook of the native man of affairs, the more or less practical and hardheaded legislator and statesman, if only complete confidence could be established between the two. That there are men of outstanding individuality who help to make political history even amongst the rudest peoples is, moreover, hardly to be doubted. Thus Messrs. Spencer and Gillen, in the introductory chapter of their work on the Central Australians, state that, after observing the conduct of a great gathering of the natives, they reached the opinion that the changes which undoubtedly take place from time to time in aboriginal custom are by no means wholly of the subconscious and spontaneous sort, but are in part due also to the influence of individuals of superior ability. "At this gathering, for example, some of the oldest men were of no account; but, on the other

hand, others not so old as they were, but more learned in ancient lore or more skilled in matters of magic, were looked up to by the others, and they it was who settled everything. It must, however, be understood that we have no definite proof to bring forward of the actual introduction by this means of any fundamental change of custom. only thing that we can say is that, after carefully watching the natives during the performance of their ceremonies and endeavouring as best we could to enter into their feelings, to think as they did, and to become for the time being one of themselves, we came to the conclusion that if one or two of the most powerful men settled upon the advisability of introducing some change, even an important one, it would be quite possible for this to be agreed upon and carried out."

This passage is worth quoting at length if only for the admirable method that it discloses. The policy of "trying to become for the time being one of themselves" resulted in the book that, of all first-hand studies, has done most for modern anthropology. At the same time Messrs. Spencer and Gillen, it is evident, would not claim to have done more than interpret the external signs of a high individuality on the part of these prominent natives. It still remains a rare and almost

unheard-of thing for an anthropologist to be on such friendly terms with a savage as to get him to talk intimately about himself, and reveal the real man within.

There exist, however, occasional side-lights on human personality in the anthropological literature that has to do with very rude peoples. The page from a human document that I shall cite by way of example is all the more curious, because it relates to a type of experience quite outside the compass of ordinary civilized folk. Here and there. however, something like it may be found amongst ourselves. My friend Dr. L. P. Jacks, for instance, in his story-book, Mad Shepherds, has described a rustic of the north of England who belonged to this old-world order of great men. For men of the type in question can be great, at any rate in low-level society. The so-called medicine man is a leader, perhaps even the typical leader, of primitive society; and, just because he is, by reason of his calling, addicted to privacy and aloofness, he certainly tends to be more individual, more of a "character," than the general run of his fellows.

I shall slightly condense from Howitt's Native Tribes of South-East Australia the man's own story of his experience of initiation. Howitt says, by the way, "I feel strongly

assured that the man believed that the events which he related were real, and that he had actually experienced them "; and then goes on to talk about "subjective realities." I myself offer no commentary. Those interested in psychical research will detect hypnotic trance, levitation, and so forth. Others, versed in the spirit of William James' Varieties of Religious Experience, will find an even deeper meaning in it all. The sociologist, meanwhile, will point to the force of custom and tradition as colouring the whole experience, even when at its most subjective and dreamlike. But each according to his bent must work out these things for himself. In any case it is well that the end of a book should leave the reader still thinking.

The speaker was a Wiradjuri doctor of the Kangaroo totem. He said: "My father is a Lizard-man. When I was a small boy, he took me into the bush to train me to be a doctor. He placed two large quartz-crystals against my breast, and they vanished into me. I do not know how they went, but I felt them going through me like warmth. This was to make me clever, and able to bring things up." (This refers to the medicine-man's custom of bringing up into the mouth, as if from the stomach, the quartz-crystal in which his "virtue" has its chief material embodiment

or symbol; being likewise useful, as we see later on, for hypnotizing purposes.) "He also gave me some things like quartz-crystals in water. They looked like ice, and the water tasted sweet. After that, I used to see things that my mother could not see. When out with her I would say, 'What is out there like men walking?' She used to say, 'Child, there is nothing.' These were the ghosts which I began to see."

The account goes on to state that at puberty our friend went through the regular initiation for boys; when he saw the doctors bringing up their crystals, and, crystals in mouth, shooting the "virtue" into him to make him "good." Thereupon, being in a holy state like any other novice, he had retired to the bush in the customary manner to fast and meditate.

"Whilst I was in the bush, my old father came out to me. He said, 'Come here to me,' and then he showed me a piece of quartz-crystal in his hand. When I looked at it, he went down into the ground; and I saw him come up all covered with red dust. It made me very frightened. Then my father said, 'Try and bring up a crystal.' I did try, and brought one up. He then said, 'Come with me to this place.' I saw him standing by a hole in the ground, leading to a grave. I went inside and saw a dead man, who rubbed me all

over to make me clever, and gave me some crystals. When we came out, my father pointed to a tiger-snake, saying, 'That is your familiar. It is mine also.' There was string extending from the tail of the snake to us—one of those strings which the medicinemen bring up out of themselves. My father took hold of the string, and said, 'Let us follow the snake.' The snake went through several tree-trunks, and let us through them. At last we reached a tree with a great swelling round its roots. It is in such places that Daramulun lives. The snake went down into the ground, and came up inside the tree, which was hollow. We followed him. There I saw a lot of little Daramuluns, the sons of Baiame. Afterwards, the snake took us into a great hole, in which were a number of snakes. These rubbed themselves against me, and did not hurt me, being my familiars. They did this to make me a clever man and a doctor.

"Then my father said, 'We will go up to Baiame's Camp.' [Amongst the Wiradjuri, Baiame is the high god, and Daramulun is his son. What 'little Daramuluns' may be is not very clear.] He got astride a thread, and put me on another, and we held by each other's arms. At the end of the thread was Wombu, the bird of Baiame. We went up through the clouds, and on the other side was the sky We

went through the place where the doctors go through, and it kept opening and shutting very quickly. My father said that, if it touched a doctor when he was going through, it would hurt his spirit, and when he returned home he would sicken and die. On the other side we saw Baiame sitting in his camp. He was a very great old man with a long beard. He sat with his legs under him, and from his shoulders extended two great quartz-crystals to the sky above him. There were also numbers of the boys of Baiame, and of his people who are birds and beasts. [The totems.]

"After this time, and while I was in the bush, I began to bring crystals up; but I became very ill, and cannot do anything since."

# BIBLIOGRAPHY

INTRODUCTORY NOTE.—It is impossible to provide a bibliography of so vast a subject, even when first-class authorities only are referred to; whilst selection must be arbitrary and invidious. Here books written in English are alone cited, and those mostly the more modern. The reader is advised to spend such time as he can give to the subject mostly on the descriptive treatises. A few very educative studies are marked by an asterisk. In many cases, to save space, merely the author's name with initials is given, and a library catalogue must be consulted, or a list of authors such as is to be found, e.g. at the end of Frazer's or Westermarck's works.

### A. THEORETICAL

- GENERAL.—Sir E. B. Tylor, Primitive Culture \* (the greatest of anthropological classics); Sir J. G. Frazer, The Golden Bough (Epitome in one vol.).
- Antiquity of Man.—W. J. Sollas, Ancient Hunters and their Modern Representatives 3\*; H. F. Osborn, Men of the Old Stone Age; R. A. S. MacAlister, A Text-book of European Archwology; G. C. MacCurdy, Human Origins; M. C. Burkitt, Prehistory and Our Early Ancestors; Brit. Mus. Guides to Stone Age, Bronze Age, Early Iron Age. As new discoveries in this field are constantly occurring, the reader should try to keep in touch with them by consulting periodicals such as Man, Nature, Antiquity.
- RACE AND GEOGRAPHICAL DISTRIBUTION.—A. C. Haddon, Races of Man<sup>2</sup>; G. Taylor, Environment and Race.
- Social Organization and Law.—Sir J. G. Frazer, Tolemism and Exogamy\*; E. Westermarck, History of Human Marriage 2\*; B. Malinowski, The Family among the Australian Aborigines; A. R. Brown, Three Tribes of Western Australia, Journ. R. Anthrop. Inst. xliii; R. H. Lowie, Primitive Society; W. H. R. Rivers, Social Organization; R. Briffault, The Mothers.

- RELIGION, MAGIC, FOLKLORE.—Sir J. G. Frazer, The Golden Bough \* \* and Folklore of the Old Testament; W. Robertson Smith, Early Religion of the Semites; A. Lang, The Making of Religion; R. R. Marett, The Threshold of Religion; R. H. Lowie, Primitive Religion; E. Durkheim, Elementary Forms of the Religious Life (Tr.).
- MORALS.—E. Westermarck, Origin and Development of the Moral Ideas; L. T. Hobhouse, Morals in Evolution 2; Sir J. G. Frazer, Psyche's Task. 2
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## INDEX

Calaveras skull, 40 ADULTERY, 195 Africans, 41, 100, 118, 127, 158, 198, 194, 195, 199 Cannibalism, 87 Cartailhac, E., 84 Carthage, 105 Age-grades, 176 Caste, 144, 179 Alpine race, 106 Cave-paintings, 21, 47-53, 221 Altan 4, 52 Americans, 40, 97, 100, 110-114, 124, Chelles, 77 China, 106, 108, 115, 142 128, 133, 138-147, 157, 168, 174, 192, 199 Chukchis, 110 Clan, 161, 171, 175, 189, 197. 208 Andamanese, 160, 188, 198 Class (matrimonial), 172 Anglo-Saxons, 198 Climate, 88-86, 101, 108, 117, 156 Cogul, 53 Animatism, 230 Animism, 228, 280 Collective responsibility, 189, 192 Anthropo-geography, 28, 84, 95-101, Colour. 82-66 115, 129 Anthropoid apes, 28, 87, 76-79, 81, 84, 111, 115, 117 Commont, V., 88 Confederacy, 174 Anthropology, 7-80, 186, 204, 227. Consanguinity, 168 Conservatism of savage, 118, 124, 242, 244 Asiatics, 87, 59, 82, 99, 105-111, 114-118, 120-122, 128, 182, 183, 142, 150, 160-162, 183, 188, 194, 216-219 183, 184, 218, 245 Counting, 25, 148, 150 Cranial index, 74 Athapascan languages, 112 Cranz, D., 191 Creswell Crags, 47 Atlantic phase of culture, 102 Cro-Magnon, 80 Aurignac, 48 Australians, 39, 49, 51, 52, 54, 118, 120, 127, 147, 157, 162, 167, 174, 190, 191, 198, 207, 219-227, 231, Custom, 38, 188-187, 213-215, 228, 227, 288, 245, 247 Dahomey, 158, 194 Dairy-ritual, 216-219 Daramulun, 207, 226, 249 Darwin, C., 8-11, 22, 64, 65, 69, 132, 244-250 Bagehot, W., 84, 185, 187, 201 Baiame, 249, 250 157 Balfour, H., 40 Demolins, E., 98, 111 Basque language, 55, 182, 184 Differential evolution, 121 Biology, 10, 18 Bison, 49, 51, 79, 100 Dog, 118 Blood-revenge, 189-194 Duel, 191, 195, 198 Boas, F., 75, 85 Borneo, 101, 184 Egypt, 102, 105, 107, 115 Brandon, 56, 59 Bronze-age, 82, 55, 107 Buil-roarer, 125-128, 207, 226, 231 Burial, 35, 79, 177, 202, 206, 248 Bushmen, 39, 81, 87, 108, 119, 126, Endogamy, 165, 178 Environment, 69, 70, 75, 96. 94-129 Eoliths, 41-48 Eskimo, 89, 111, 190, 191 160 Eugenics, 68, 70, 98, 95 Butler, S., 66 Eurasian region, 106-116 Buzz, 128

Europeans, 83-59, 75, 77-82, 93, 102105, 108, 109, 124, 126, 127, 188, 185, 198, 202, 280, 241

Evans, Sir J., 42, 124

Evolution, 7-12, 14, 22, 61-72, 186, 205

Exogamy, 159, 161-165, 168, 169, 172, 175, 226

Experimental psychology, 28, 88

Family, 159, 160, 164, 171, 178, 196 Family jurisdiction, 196 Flint-mining, 56, 57 Folk-lore, 186, 210 Frazer, J. G., 163, 172, 200 Fraedom, 130, 154, 181, 185, 288, 241 Fuegians, 188-140, 145

Galley Hill skull, 46, 80 Gargas, 47-50 Genealogical method, 147 Gesture-language, 184, 149 Ghosts, 229, 280, 248 Gibraltar skull, 78 Greece, 127, 157, 172, 185, 241 Greenwell, W., 56 Grime's Graves, 56 Haddon, A. H., 88, 127 Haeckel, E., 118 Hand-prints, 49 Harrison, B., 41, 44 Head-form, 78–82, 107 Head-hunting, 185 Heidelberg mandible, 77 History, 11, 18-15, 80, 97, 156, 227, 242 Hittites, 107 Hobhouse, L. T., 160 Holophrase, 140–152, 239 Horse, **87**, **50**, **100**, 108 Howitt, **A. W.**, **168**, 281, 246 Humility, 212

Ice-age, 21, 38, 86, 88, 46, 106, 182
Icklingham, 38
Imagination, 28, 218, 228, 234
Incest, 189, 200
India, 115
Individuality, 29, 241-250
Indo-European languages, 18
Indonesis, 116, 118, 121, 184
Initiation, 127, 174, 176, 211, 2\*\*227, 246-250
Instinct, 23, 68, 71, 89-91

Intichiuma ceremonies, 51, 167, 220-228 Iron-age, 40, 119

Jacks, L. P., 246 James, W., 247 Jersey, 32, 36, 45, 243

Kellor, F. A., 91 Kent's cavern, 46 Kingship, 194, 195, 200, 203 Kinship, 168, 177 Knappers, 57, 58 Koryaks, 110

La Chapelle-aux-Saints, 79 Lamarck, J. B., 64, 65 La Naulette mandible, 78 Language, 24, 180-152 Lapps, 110 Law, 26, 181-203 Lecky, T., 102 Le Moustier, 38, 45-47, 71 Le Play, F., 98 Lévy-Bruhl, L., 188 Lineage, 165, 168 Lloyd Morgan, C., 288 Local association, 177 Luck, 167, 200, 218, 218

McDougall, W., 90 Madagascar, 114, 158 Magic, 27, 51, 177, 202, 208-210, 224, 245, 247 Malays, 114, 122, 126 Malthus, T., 69, 157 Mammoth, 87, 78, 111, 132 Man, E. H., 188, 198 Mas d'Azil, 54 Masks, 58 Matriarchate, 166 Matrilineal, matr potestal, 165, 196 matrilocal, matri **fedicine-man, 246–25**0 1editerranean race, 104, 109, 119 felanesians, 116, 121, 128 iendelism, 67 fentone, 85 Military discipline, 192, 199 Miscegenation, 93 Mob-psychology, 92, 201, 239-241 Moieties, 175 Morality, 29, 285-241 Mother-right, 166, 169, 197 Myres, J. L., 102

Nation, 174
Natural selection, 68-71, 84
Natural 51, 82, 155, 211, 290
Neanderthal race, 37, 39, 77-81, 37, 120, 206
Negative rites, 216-219, 224
Negritos, 81, 116-118, 120, 160, 188
Negro race, 80, 91, 116, 120
Neolithic age, 40, 58-59, 81, 104, 109
Niaux, 50-58
Mordis race, 109

#### Ordeal, 191, 195

Pacation, 192, 195
Painted pebbles, 54
Palæolithic age, 40, 48-54, 108, 124 Papuasians, 116 Patagonians, 114 Patrilineal, patri potestal, 165, 196 patrilocal, patri-Payne, E. J., 188 Persecuting tendency, 187 Perthes, Boucher de, 48 Phantasm, 229 Philosophy, 15-17, 72, 154, 228 Phratry, 172 Pictographs, 51 Pithecanthropus erectus, 76, 115 Policy, 17-19 Polynesians, 121, 128, 188, 194 Positive rites, 219-224, 284 Pottery, 88, 55 Pre-Dravidians, 120 Pre-historic chronology, 84 Pre-history, 21, 81, 97, 111 Pre-natal environment, 94 Prestwich, Sir J., 42 Profane vessels, 217 Property, 179, 192, 195, 19 Proto-history, 81, 97

#### Quarte crystals, 248-250

Race, 22, 59-94, 96, 98 Ratzel, F., 98 Reincarnation, 167, 221, 224 Reindeer, 87, 55, 78, 106, 110 Religion, 27, 49, 127, 166-168, 204-285, 246-250 Ridgeway, W., 107 Ritea, 212, 219-324, 284 River-phase of culture, 102 Sacramental meal, 222 Sacredness, 28, 52, 127, 168, 203, 218, 217, 218, 224, 226 St. Acheul, 88, 45, 46 Sanction, 195, 203 Savagery, 11, 158 Science, 12-15 Secret Societies, 177 Seligmann, C. G. and B. Z., 161, 248 Sex-totems, 176 Shaw, B., 66 Slander, 198 Slavery, 179 Smith, W. Robertson, 218 Snare, F., 57 Social organization, 24-26, 152-131 Solutré, 47, 108 Spear-thrower, 281 Spencer, B., and Gillen, F. J., 90 163, 175, 220, 244 Spirit, 228, 229 Steinmetz, S. R., 197 Stratigraphical method, \$1-36 Suggestion, 283-235, 287-240 Survivals, 186 Sutherland, A., 157
Sympathetic magic, 126, 233
Sympathetic phase of society, 236
Syntalic phase of society, 236

Rivers, W. H. R., 147, 216, 219

Butot, A., 41, 46

Syntalic phase of soctation 286
[aboo, 200-208, 215] zeo
[asmanians, 84]
[bames gravels, oo-ze, 26
[flotar, 104]
[flotar, 104]
[flotar, 104]
[flotar, 160, 166-168, 175, 188,
220-228, 250
[fribe, 178
[ylor, E. B., 184, 228-239]

Use-inheritance, 64, 98

Variation, 66-68 Veddas, 120, 160, 248

Wallace, A. B., 69, 112, 184 Wealden dome, 48 Weismann, A., 65, 66 Westermarck, E., 285 Witchcraft, 202, 210